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**Stull, Cook and Bernard, Jnl. Allergy 3:352: 1932*
***Spain and Hopkins, Jnl. Allergy, 1:209: 1932*

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Public Health in Mexico

Notable advances have been made in Mexico with e assuming of the direction and control of health de- rtment work by the Ministry of Public Welfare. A port of recent activities appears in *Mexico News* eb. 15, 1944). There has been a great shortage of ctors in Mexico, but an increase in the number of idents turning to medicine is hopeful. The aim of e Ministry is to reinforce the family unit by aiding e home in cooperation with private welfare agencies, d providing better public institutions to serve the meless. Government funds support the spreading vernment work and supplement the aid of private arities which have both institutional and home wel- e service under their care. The construction of the eat Medical Center of Mexico City is progressing d already includes the Infant hospital, the Cardiolog- l Institute and the Mundet Maternity Home. A ildren's Hospital with a capacity of five to six hun- ed, will be supported by funds from social welfare well as the patronage group charities and will also ndle out-patients. A Hospital for Chronic Invalids ll soon be opened in Tepexpan with accommodations a thousand patients. This institution will be some- ng quite new and up to date in Mexico, as are also e blood banks, started last year. Further contribu- ns by the Ministry last year furnished emergency l during two disasters, the outbreak of the Paricutin lcano in Michoacan State and the devastating cy- ne on the Sinaloa coast.

A bird's-eye view of other medical welfare activities ows the operation of 122 maternity-infantile cen- s, training courses in pediatric and infant welfare work, dining halls for indigent families, foreign training for physicians, nurses and medical students and increased nurses training. A widespread campaign against smallpox was pushed, and better control exercised over venereal disease, typhoid fever and typhus with gratifying decreases in these. Sanitation and water supply have been improved, further safeguarding the health of the Mexican people.

Mexico sent representatives to three important foreign health conferences and held the first National Welfare Congress and the Fifth Assembly of Surgeons in Mexico. The first Pan American Health Day was also observed in Mexico, on December 2nd. Homage was paid to the union of the countries of the Continent, and the evils to be avoided were stressed.

Tuberculosis in Industry

Although the tuberculosis hazard in industry to the young, and especially to young women, is recognized by voluntary and official health agencies and by many others concerned, it is not at all appreciated by young women, says the *Amer. Jour. Public Health*, July, 1943. Actually, girls going into industry tend to believe that they acquire ruggedness by virtue of donning pants and getting their faces dirty. This attitude calls for sound and far-reaching instruction as to diet, rest, the danger of time-and-a-half and double time. It calls, too, for properly managed plant cafeterias and proper plant ventilation, for good public health nursing in the industrial community, for sound medical advice. In fact, it demands all the measures included in a good industrial hygiene program.

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Literature and natural color illustrations will be sent to physicians on request.

*Drs. Frederick H. Falls, George H. Rezek and S. T. Benensohn, Surgery, Gynecology and Obstetrics, September, 1942, Vol. 75, pp. 289-299.

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Open Forum

Illness from Cancer

Harold F. Dorn presents a thoroughgoing study of illness from cancer in the United States (*Public Health Reports*, Jan. 14, 21, and 28, 1944). While statistics indicate that deaths from cancer have shown a marked increase in the last forty years there is still no clear picture of the overall problem, and no absolute proof that the disease is increasing. Modern diagnostic methods, wider statistical facilities, more scrupulous record keeping may be blackening the picture. The statistics are a valuable reminder that cancer is by no means under control, and that it is of the utmost importance to keep up the battle of education and information about early recognition of cancer so that it may be arrested or cured.

Dorn finds that while the death rate has been increasing there is an indication that the rate of increase is slowing down. He finds also that there is almost no information available on the number of living persons having the disease. His study is accordingly directed at that gap in our information. From the information it has been possible to get, which means from the widely scattered records of diagnosed cases, the following interesting facts emerge. About 430 out of every one hundred thousand white persons living in cities in the United States are either under treatment for cancer or under observation because of previously treated cancer. About 230 new cases per one hundred thousand white urban residents are diagnosed each year. Many of these malignant growths are of recent origin, but some are far advanced.

The rates for the colored population are considerably lower than for whites. This may not be a true picture of the situation, since it was extremely difficult to get information on the colored; still it is generally believed that Negroes are less susceptible than whites to skin cancer. For all cities combined, the incidence rates were thirty-eight and twenty-eight for white males and females as compared with five and four for colored males and females. Cancer of the genital system is the only form of cancer which is as frequent among colored as among the white population.

The cancer rate is reckoned as higher for females than for males, and this proportion seems to hold for both white and colored. However, there are qualifying factors: women are more likely to come under medical care than men, and it is also quite probable that many colored men who never see a doctor may have undiagnosed cancer which is not necessarily recognized even at death.

Concerning the primary sites of cancer, the records show that in women cancer occurs most frequently in the genital system, while in men the most frequent site is the digestive system. Other primary sites, in order of frequency, are, in men, the skin, the genital system, the buccal cavity, the respiratory system, and the urinary system; in women, the digestive tract, the skin, the respiratory system, the buccal cavity, and the urinary system. About one half of the white women receiving medical care for cancer are being treated for cancer of the breast (twenty-six percent) and the uterus (twenty-three percent). In men the primary sites are more uniformly distributed.

One of the most striking features of the illness rates from cancer is the rapid increase during the latter half of the life span. For white males the incidence rate for the oldest age group, seventy-five years and over, is more than one hundred times the rate for the age group twenty to twenty-four years and more than two hundred times the rate during the first five years of life. The corresponding figures for white females are somewhat less, being seventy-six and 191, respectively.

Studies of regional difference show the highest cancer rate in the South, the lowest in the North, and with the West in between; the highest mortality rate from cancer is in the Northeast and in the Pacific Coast states, with the lowest in the South.

The author concludes that the number of cases of cancer in living persons is unknown but on the basis of the prevalence rates found in this study, it is estimated there are about four hundred and seventy-five thousand to five hundred thousand persons under treatment for cancer at any given time in the United States. Approximately three hundred thousand new cases of cancer are diagnosed for the first time during each year. In addition to these cases are those which have been treated and cured as well as those with an undiagnosed tumor. The number in the latter two categories is unknown.

In Cancer, Action in Time Means Life

It has been stated that cancer is the most curable of the fatal diseases. That is an interesting statement and is not a contradiction of itself, as it might at first seem to be. Its justification lies in the nature of cancer itself—for cancer in its early stage is localized, limited, and capable of being completely removed or destroyed.

Cancer in its late stages is as sinister as a disease can be. It is widespread and has invaded surrounding tissues with ill-defined irregular strands of abnormal growth. If untreated and unchecked, cancer is uniformly and universally fatal. It is this grim fact that brings out the contrast between early and late stages of the disease.

The picture, however, is far from being a gloomy one. Each year more and more people are learning that "time" is the key word in cancer control. Each year thousands more people are coming to their doctor with very early signs and symptoms that may mean cancer. As a result they are being treated in time to prevent cancer or to cure it if it has started. The value of annual or semi-annual physical examination is becoming clearer to an ever-increasing number of men and women. The Women's Field Army of the American Society for the Control of Cancer is growing yearly at a faster rate. Today three hundred thousand women throughout the United States are enlisted in the fight against cancer—the fight to bring knowledge and confidence into every home in the country.

Cancer prevention clinics—where perfectly well persons report periodically for a physical "check up"—have been established in some cities and are doing excellent work. The idea will spread and grow. Lives will be saved, suffering avoided. Death will be cheated. Americans of the future will visit such clinics as a matter of routine.

It is well when the world is darkened by the fierce storm clouds of war to remember that there are men and women working quietly but tirelessly to allay fear and to bring peace and hope to hundreds of thousands

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of people—to your friends and mine—to your family and mine—perhaps to you and me.

For thirty years the American Society for the Control of Cancer at 350 Madison Avenue, New York, has been the leader in this campaign. It will gladly provide, without charge, information which you may desire. It asks you to enlist in the fight against cancer for your own sake as well as for those whom you may be able to help. Do not delay. Remember that in cancer "action in time means life".

C. C. LITTLE, SC.D., *Managing Director*
American Society for the Control of Cancer

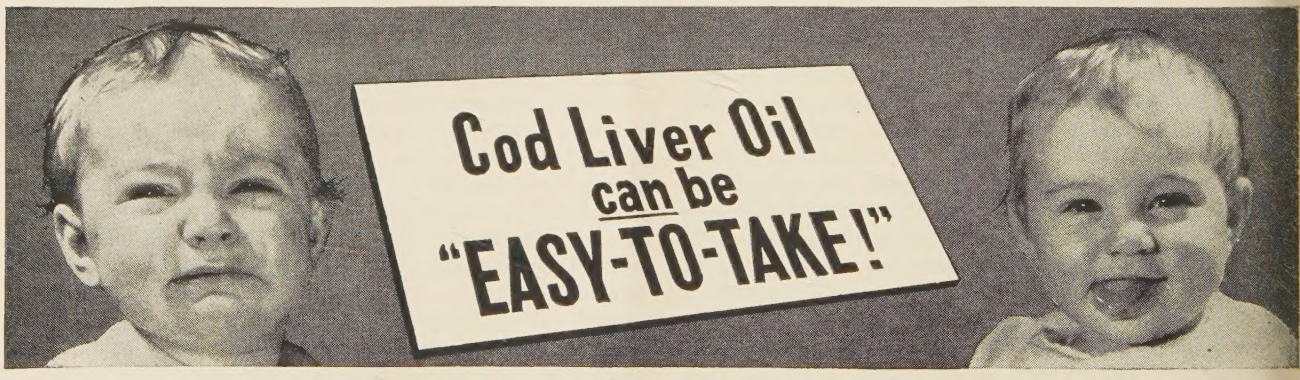
War Medicine

The two 1943 volumes of *Harofe Haivri,* the Hebrew Medical Journal, are devoted to an interesting and well rounded symposium on war medicine. Edward K. Barsky gives his personal observation on military surgery in the Spanish Civil War, the prelude to the present conflict. The pitiful lack of equipment and facilities were met with ingenuity and superhuman effort and led to a valuable appraisal of the naked essentials in emergencies, the speed of action and mobility required, the morale building effect of visible aid at hand, and the absolute necessity of learning to react with proper measures to the type of wound encountered. Other articles of especial interest are, "Treatment of gunshot wounds of the head and brain during the present war", by Leo M. Davidoff; "The early treatment of war wounds with emphasis on the prevention of deformities", by Jacques W. Maliniac; "Newer conceptions of the treatment of burns", by Jesse Bullowa and C. L. Fox, Jr.; "The status of anesthesia in military surgery", by S. D. Ehrlich; "Shock syndrome and its treatment", by S. Standard; "Ocular injuries in chemical warfare", by Ed. B. Gresser, based on first world war experiences; "Physical therapy in war medicine", by William Bierman, and "The importance of proper prosthesis in postwar rehabilitation", by H. M. Wertheim.

Americans know too little of many other activities described in these volumes. Sections on Palestine in the war, the work of Hadassah in giving aid to the medical military forces stationed in Palestine and the Near East, are illuminating. The Red Mogen Dovid, the counterpart of the Red Cross has established twenty-three stations and equipped sixteen mobile hospitals in those areas. The Kupat Holim, or Workers' Sick Fund, representing an organization with a 96,000 membership and a country-wide network of 218 dispensaries and a number of well equipped hospitals offering their facilities to the United Nations armed forces, is a remarkable and hitherto barely realized contribution.

Sympathetic studies of two outstanding leaders in Hebrew medical history, Adolphus S. Solomons, co-founder of the American Red Cross, and Professor Max Neuburger, the medicohistorian, enlarge still further the obligation of modern medicine to the Hebrew race. A thirteenth century medical manuscript, the famous *Arabic Pharmacopoeia,* still used by native druggists in Egypt and neighboring lands, is reproduced and translated.

These two volumes should be widely distributed for the valuable reference material they furnish, not only for the Palestine and near Eastern battle areas, but for all parts of the world where practical, concise comment and experience can be used.



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Motion Pictures in Disability Cases

The admission in evidence of motion pictures in actions for indemnity for personal injuries, payable during a period of total disability to engage in any business for remuneration or profit, or to follow any gainful occupation, has recently been the subject of decision, following strenuous contest, in several of the higher courts. Their admission is usually sought by the defendant in such actions, the purpose of the admission being to refute claims and medical evidence in support of such claims introduced by the plaintiff, and supplementary to the defendant's own expert evidence.

These pictures, in the cases so far decided involving the question, have been admitted, on being properly identified, not without some preliminary doubts expressed by individual judges but ultimately dispelled, as to the methods employed to secure the pictures and the methods of taking them as testified to in the individual cases. On these points each case, differing in its facts and circumstances, will be left to the discretion of the trial judge.

Two such cases were decided last year by the Florida Supreme Court. In the latest, decided on March 19th, Wallendorf vs. New York Life Ins. Co., Fla. 12, So. 585, the court, on appeal from a judgment for the defendant insurance company, affirming the judgment, could not say from the evidence in the record that error resulted because of admission into the evidence of the challenged motion pictures of the plaintiff playing golf during the period of claimed disability.

In that case the plaintiff claimed to have become permanently disabled by disease, viz., Addison's syndrome and extreme nervous exhaustion with hypotension. Three physicians testified for the defendant that the plaintiff was in good health, and also that during the time within which he was alleged to have been disabled he played golf two or three times a week, on each occasion playing eighteen holes. A moving picture film of the plaintiff playing golf on a Florida golf course was admitted in evidence over the plaintiff's claim that such admission was prejudicial and erroneous.

In the Wallendorf case the Florida Supreme Court followed its own decisions in Gulf Life Ins. Co. v. Stossel, decided in 1937. This was the first case in which the Florida court was called upon to rule on the challenge of admission of moving picture films as evidence in disability cases. The two cases were similar on the facts. The trial judge found that the plaintiff, insured by two polices providing for disability benefits, had suffered a compound fracture of the third lumbar vertebra and other injuries in an airplane accident, thereby becoming physically incapacitated to such an extent that he came within the coverage of the policies. This question, the Supreme Court held on appeal, turned on the probative force of the evidence, and therefore the court would not disturb the decree of the court below as being clearly erroneous.

But on its first hearing of this appeal, the Florida court expressly held "that such evidence is admissible, but to do so, it must be produced under the direction of a commissioner approved by the court for that purpose. Opposing counsel should also have notice and an opportunity to be present and the application to take it must make it appear to the trial court that it is ma-

In the Dietary Adjustment

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During periods of acute febrile disease, dietary adjustment must be made to satisfy the change in nutritional demands. Protein requirements are increased 50 to 100 per cent, caloric expenditure is raised because of increased heat loss, and vitamin needs, especially those of the water-soluble groups, are greater. Only by fully meeting these altered requirements can recovery be hastened, can convalescence be shortened, and the usual state of lethargy reduced in severity.

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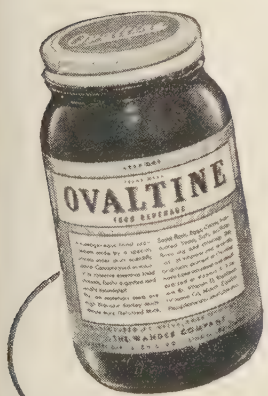

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*Each serving made with 8 oz. milk; based on average reported values for milk.

terial and will enlighten the court on the issues involved. Otherwise it should not be admitted".

On a rehearing of the appeal, at the instance of the defendant on this particular point, the court reaffirmed its decision for the plaintiff, but modified its opinion on the procedure prescribed for admitting the moving pictures in evidence. On further consideration of the point, the court said it was convinced that the procedure prescribed in its first opinion, which procedure "grew out of charges and counter charges of bad faith on the part of counsel with reference to the verity of the evidence or films in question," should not be required in all cases.

"We do not," the court said, "renounce the requirement as to notice and the production of such evidence under the direction of a commissioner. We think it the proper procedure in many cases, but if in the judgment of either litigant the notice and appointment of a commissioner should not be availed of, the litigant may proceed in the manner deemed by him advisable, but to be competent evidence the films must be properly authenticated and shown to be a faithful representation of the subject, sound, movement or other tangible or intangible thing which they purport to reproduce. When such a showing is made in the trial court moving picture films should be admitted under the same rules as photographs."

On the Florida court's first hearing of its third consideration of the Stossel case, Justice Brown concurred in the suggestion of the majority opinion that "to be admissible, such pictures (taken after suit is brought) should be taken by or under the supervision of a court commissioner. While, fairly taken, such pictures might be useful in exposing fraudulent claims, when such are attempted, they can be taken in such a way as to mislead and give a false impression. I do not mean to intimate that any such deliberate effort to mislead was present in this case, but any general rule that is adopted should take this possibility into consideration and erect reasonable safeguards against it". But on the rehearing, Justice Brown, again concurring specially in the court's opinion, said: "Upon further consideration of this matter, I think the correct rule is stated in the last sentence of the opinion. After all, moving pictures are but a reproduction of a rapidly taken series of photographs, and should be admitted under the well-established rules governing the admission in evidence of photographs."

(To be continued)

Tuberculosis a Major Health Problem

Improved health conditions are in evidence on a broad front, yet on all sides we encounter much disability and many deaths due to diseases for which we have adequate means of prevention and control, says Dr. H. D. Lees in *Social and Economic Aspects of Tuberculosis*. Tuberculosis stands out, he continues, as one of the chief offenders in this group. Sixty thousand annual deaths represent but a small part of the penalty paid by the American people for failure to eradicate this disease. It is estimated that half a million persons in the United States have tuberculosis . . . yet the vast majority of this group will not be given the advantage of early diagnosis and early treatment. This presents a public health problem of major significance.

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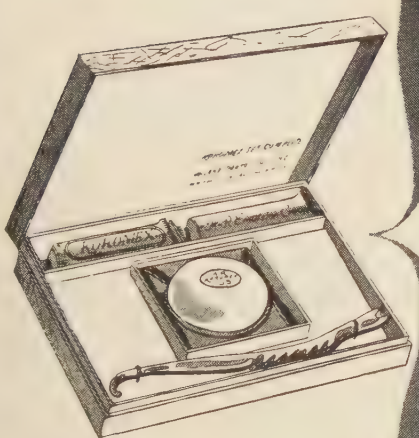

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Control of Sepsis

J. M. Robson (*Edinburgh Medical Journal*, July 1943) in discussing the control of sepsis, says that the rapid devolopment in chemotherapy during the last decade has radically altered our conceptions regarding the value of chemical substances in the treatment of infection, though as great importance as ever is placed on surgical treatment and rest. The period which follows infection may be roughly divided into three stages, immediate infection, delayed infection and established sepsis, and it is the stage at which treatment is initiated that largely determines what can be achieved by chemical substances.

Immediate disinfection.—There is good reason for believing that all the bacteria in an infected wound can be killed by certain substances, provided treatment is started soon after infection. Unless the wound can be closed, however, there is great danger of reinfection, which can be prevented by the use of a bacteriostatic substance.

Delayed disinfection.—After the stage immediately following infection, complete sterilization of the wound by a bactericidal substance can no longer be achieved. The multiplication of organisms can, however, be prevented by the use of bacteriostatic substances (sulphonamides, penicillin), and the infection will usually be dealt with by the natural defences of the body.

Established sepsis.—There is evidence that a variety of substances can be effective even at this stage. The chief value of chlorine-releasing substances is probably in clearing away dead tissue and pus. Proflavine powder, sulphonamides, penicillin and propamidine appear to exert an action on the infection organisms, though it is always preferable to remove all purulent material before applying the chemical substance.

It seems likely that with the discovery of new and more active antiseptic and chemotherapeutic substances there will be an appreciable lengthening of the periods during which it will be possible to achieve both immediate and delayed disinfection. A more rapid and effective treatment of established sepsis may also be anticipated.

Mouth Infection

Edgar Chapman, in an interesting article on the implications of mouth infection (*Dental Items of Interest*, August 1943) quotes Dr. Charles H. Mayo as saying, "The difference between a well cared for and an uncared for mouth is ten years of life". The author points out that the subtle danger of oral sepsis has been definitely proved and deplores the fact that dentistry seems to be more interested in its mechanical aspects than in pathological conditions of the mouth. He believes that if dentistry had followed the teachings of Pasteur and based its work upon them, dentistry could have been a true health profession.

In regard to the widespread occurrence of mouth infection the author says that in America examination of the mouth discloses the almost universal presence of inflamed gums, pyorrhea pockets, and ill-fitting dental work which result in infection and often halitosis. The dental profession should realize, the author continues, that infected dental areas are part of an actual living being and that the spread or absorption of these areas is closely interwoven with the welfare of the body as a whole. They strike at organs—viscera and joints. The infected dental areas and diseased tonsils present a

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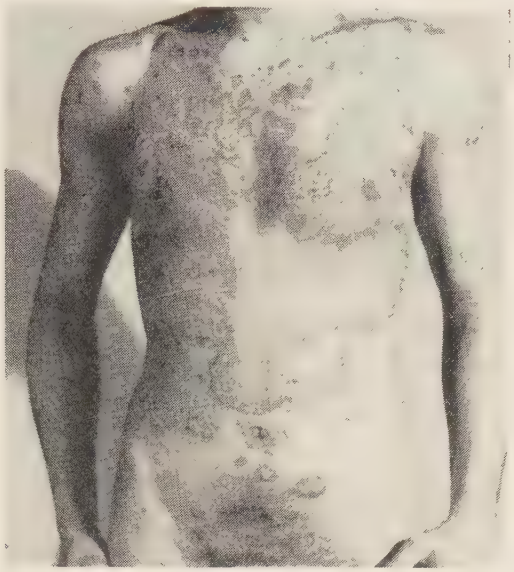

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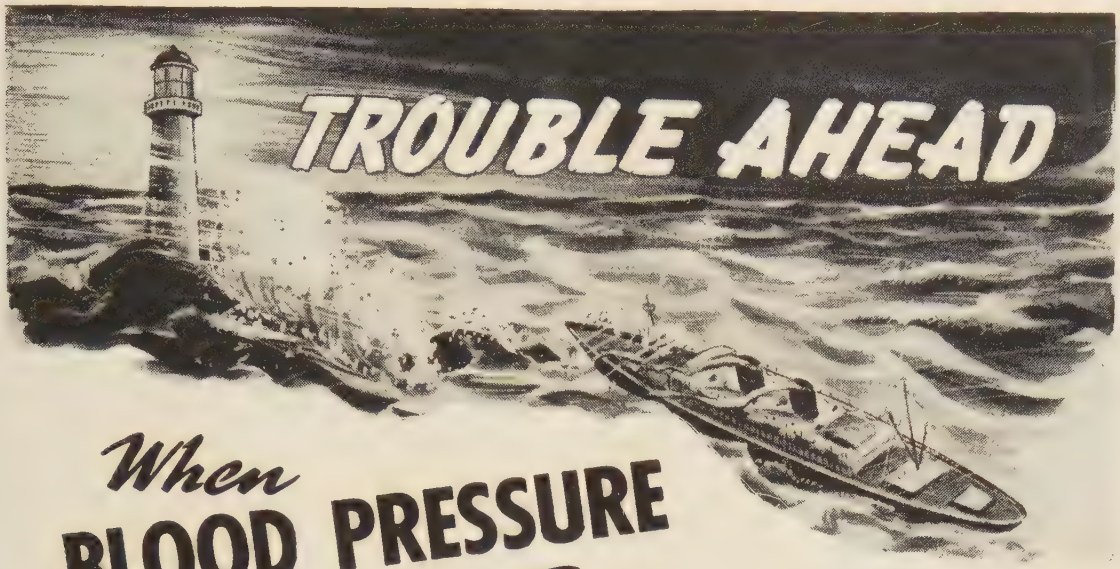
problem of vast importance to the human race. Loss of teeth, he says, is the smallest factor involved. The important thing is to cleanse the mouth of the bacteria which cause the infection. Persons with a lessened resistance to heart and kidney disorders as a result of an inherited weakness should take special care with the aid of dentistry, pathologically considered, to avoid absorption from dental and tonsillar sources.

The author quotes the opinions of a number of leading physicians on the importance of oral health in preventive medicine. All agree that dental foci of infection are a common cause of systemic diseases, affecting particularly the gastroenterological, genitourinary and respiratory tracts, and the cardiovascular system. Dr. Charles H. Mayo is again quoted as follows: "I am pleading for closer cooperation between physician and dentist in the practice of preventive dentistry. I am not thinking only of the prevention of dental decay or pyorrhea, but of injury to the joints, the muscles and the viscera, arising from disease in or about the teeth. While it may be too much to expect all dentists to be doctors of medicine, all dentists should know much more about medicine, and physicians and surgeons should know much more about dentistry."

The author believes that pyorrhea can be cured even after the disease has made considerable progress, but there are cases, however, in which extraction of the teeth is the only remedy. To prevent pyorrhea the mouth should be examined regularly and properly cleansed. It should be remembered, however, he said, that even after physical conditions have been improved by dietary measures the pyorrhea pockets still remain and should be removed by periodontal technique. He concludes with the fervent hope that when peace comes, dentists will take up the war against mouth infection.

The War and Tuberculosis

It is fully realized that it is essential for our future to win this war, and the finding of a case of tuberculosis, with the prevention of its further spread, is as definite an act toward winning the war as the destruction of an enemy plane or tank, says Dr. Irving R. Tabershaw (*Industrial Medicine*, March, 1943). This is especially true of our industrially employed, the writer continues. A case of tuberculosis in a worker not only removes an important element in production but also necessitates the dissipation of the energies of many others to restore him to health. These people can and should be engaged in the more fruitful work of winning this war. The physicians, nurses, social workers, educators, attendants, dietitians, and all others directly or indirectly related to the care of a tuberculosis case will find that they have only a minimal amount of time to care for tuberculosis. Although by case finding their load will be greater, the removal of an open case from industry will in the long run prevent the increased rise in tuberculosis morbidity and mortality which we greatly fear. The industrial case, therefore, is more important than just any case of tuberculosis. Dr. Tabershaw believes that when industry and the worker realize the terrible cost in manpower and human suffering that tuberculosis entails and that a method of control is feasible, then case finding in industry will be more eagerly accepted and may, in fact, be one of the outstanding contributions toward public health that will survive this war.



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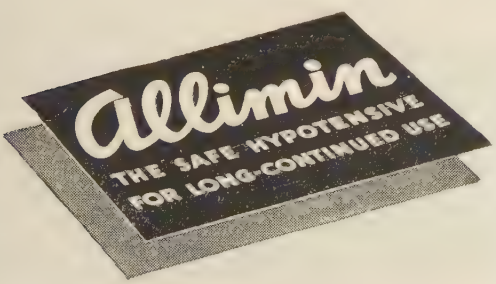

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War Wounds in the Libyan Desert

John Devine, of the Australian Army Medical Corps, brings out some interesting points on the treatment of war wounds among Libyan Arabs in 1941 (*Med. Jour. Australia,* Sept. 4, 1943). These wounded men had usually received no chemotherapy and often were not treated for days after being wounded. The author states that the results of treatment of war wounds in this area were better on the whole than those obtained during the 1914-1918 war. Improved surgical techniques, chemotherapy, climate, and possibly less virulent organisms in the terrain have been thought to explain this. In the eleven cases discussed none of the injured had received sulfanilamide therapy prior to admission to hospital, and some had been injured from several days to one month previously. The only fatal case was that of a man who refused treatment on religous grounds and died after two months of slow sepsis. A striking feature of all these cases was the late beginning of sepsis and its mildness when fully developed. In spite of gross contamination and the length of time before treatment little evidence was found of local infection and none of general infection in other cases.

Sulfanilamide therapy has been considered by many to be the cause of the long delay in the desert of the onset of sepsis in these wounds. Military patients however, who had lain wounded in the desert for days without treatment, responded as did the Arab wounded. Among the Arabs, some of the factors may have been the absence of infection from hemolytic streptococci from the nose and throat of attendants, and greater natural resistance to germs of their own environment. In the opinion of the author dryness of climate and lack of virulent organisms were of primary importance, given adequate drainage of the wound and removal of enough deep fascia by the wounding missile, or surgically, to relieve tension. Vaseline as a means of promoting drainage was found especially useful. Sulfanilamide was used in the hospital to control whatever infection developed.

Future Opportunities for Nurses

The Nursing Information Bureau has released interesting information regarding the plans under way for graduate nursing education and the scope of the Cadet Nurse Corps. The great demand for nurses at present still exists and as many as possible are being trained. What the future opportunities are for these nurses is well worth summarizing. Communities everywhere will require many when they are once more available; rural nursing, public health work, assistants in mental hygiene are also wide fields of opportunity. The public health nurse especially will have a vital task in the care of patients deformed or crippled by war. Industrial nursing is bound to develop into a tremendous field.

In preparation for all this work the Federal Government up to January 1944 has allotted over a million dollars to forty-three institutions, including colleges and universities offering advanced programs of study to graduate nurses. More than nine million dollars have been allotted to training schools for the Cadet Nurse Corps.

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Professor Arturo Castiglioni

On the Occasion of His Seventieth Birthday

Dr. Arturo Castiglioni was born at Trieste on April 10, 1874. He studied medicine at the University of Vienna and graduated in 1896. He worked for two years under Schrőtter in Vienna and five years in a civil hospital at Trieste. He devoted himself to the study of medical history and was formerly professor of the history of medicine at the University of Padua, and professor of the history of science at the University of Perugia, Italy. He was also head of the sanitary service of the Italian Line, and a member of the Supreme Council of Health and Sanitary Defense in Rome. At present he is research associate in the history of medicine at Yale University School of Medicine.

Professor Castiglioni is the author of numerous books, monographs and articles on medical history. Among his most notable works are: *Il volto di Ippocrate,* Milan, 1925; *Storia della Medicina,* Milan, 1927 (revised edition, 1936); French translation, Paris, 1931; German, Vienna, 1937; Spanish, Barcelona, 1940; American edition, New York 1941; *Italian Medicine,* New York, 1932; *The Renaissance of Medicine in Italy,* Baltimore, 1934; *The History of Tuberculosis,* New York, 1933; *Incantesemo e Magia,* Milan, 1934, and *L'orto della Sanita* (The Garden of Health) Milan, 1935. He was a columnist of the *Corricre della Sera* in Milan and many other newspapers.

Dr. Castiglioni was Noguchi lecturer at the Johns Hopkins University and visiting professor at Columbia, Yale, Loyola and many other universities in this country in 1933. He was also lecturer at Buenos Aires, Montevideo and other universities in South America. He is an honorary member of the Royal Society of Medicine in London, of the Academia Nacional de Medicina of Buenos Aires, honorary professor at the University of Santiago, Chile, and president of the New York Society for the History of Medicine.

As a teacher and author of medical history, Professor Castiglioni occupies a high place in our profession. has won international recognition as an authority on this subject. He is now in good mental and physical vigor, and we expect him to continue his useful work and enrich our medicohistorical literature.

Solomon R. Kagan
Roxbury, Mass.

Our Contributors

Tom A. Williams, M.D., C.M., Washington, D.C., received his medical degree from the University of Edinburgh Faculty of Medicine in 1896, and the degree of C.M. from the Royal College of Surgeons in 1905. He later did postgraduate work at the University of Paris, Harvard University, and the University of Chicago. He came to the United States in 1902 and has practiced medicine in Washington since 1908. He is a neurologist and a psychiatrist and has made valuable contributions to the literature of these specialties. He was at one time director and psychiatrist to the Child Guidance Clinic at Miami, Florida, and lecturer on mental hygiene at the University of Miami, and also at Duke University. He served with the American Red Cross in Paris during the first world war as advisor in neuropsychiatry and psychiatrist to the Medical Intelligence and Research Department. He is a member of numerous national and foreign medical societies.

* * *

R. J. Behan, M.D., F.A.C.S., Pittsburgh, Pa., was graduated from the University of Pittsburgh in 1902 and from the University of Berlin in 1914. He is a member of the surgical staff of St. Joseph's Hospital, Pittsburgh, City Home and Hospital, Mayview, and Allegheny County Home and Hospital, Woodville. He is the author of several books on pain, trauma, and cancer. He is past governor of the American College of Surgeons, and is regional director of the Pan American Medical Association.

* * *

Jerome M. Schenk, M.D., Topeka, Kansas, received his medical degree from Long Island College of Medicine, Brooklyn, and served a rotating internship at the Jewish Hospital, Brooklyn. He was formerly a lieutenant in the Field Artillery Reserve, U. S. Army, and a member of the U. S. Field Artillery Association. At present he is a lieutenant, Medical Department Reserve, U. S. Army, and is a member of the Reserve Officers Association of the United States. At present he is resident in psychiatry at the Menninger Clinic.

* * *

Ralph H. Cheney, M.S., Sc.D., Brooklyn, N.Y., received his degrees at Harvard University. He is at present chairman of the Biology Department of Long Island University, professor of biology at Brooklyn College of Pharmacy, resident investigator of medicinal plants at Brooklyn Botanic Garden, chairman of the Biology Section and vice-president of the New York Academy of Sciences. He is especially interested in research of the physiological and histophysiological effects of purine compounds, particularly caffeine.

* * *

William Frankman, M.D., Boston, Mass., studied medicine at the New York Homeopathic Medical College and Flower Hospital and was graduated from the St. Louis College of Physicians and Surgeons in 1921. He served a one year internship at the Northwestern General Hospital in Philadelphia and other internships at the Willard Parker Hospital and the Lying-in Hospital in New York. He practised medicine for ten years in Boston, following which he went to Vienna where he did postgraduate work in the Vienna General Hospital. His hobbies are walking, swimming and writing. He is now in active practice in Boston.

* * *

Cecil Clarence Lawhorn, M.D., Milwaukee, Wis., was graduated in medicine from Memphis Hospital Medical College. He is a member of the staff of the West Side Hospital, Milwaukee, and is engaged in the general practice of medicine and surgery. He is a veteran of the last world war and his hobby is politics.

* * *

John N. E. Brown, M.D., Toronto, Canada, received his degree in medicine from the University of Toronto Faculty of Medicine in 1892, and has now retired from active practice. He has always taken an interest in medical history and has made many valuable contributions to the literature, in the form of books, and articles published in scientific journals. He is past president of the Toronto Medical History Club.

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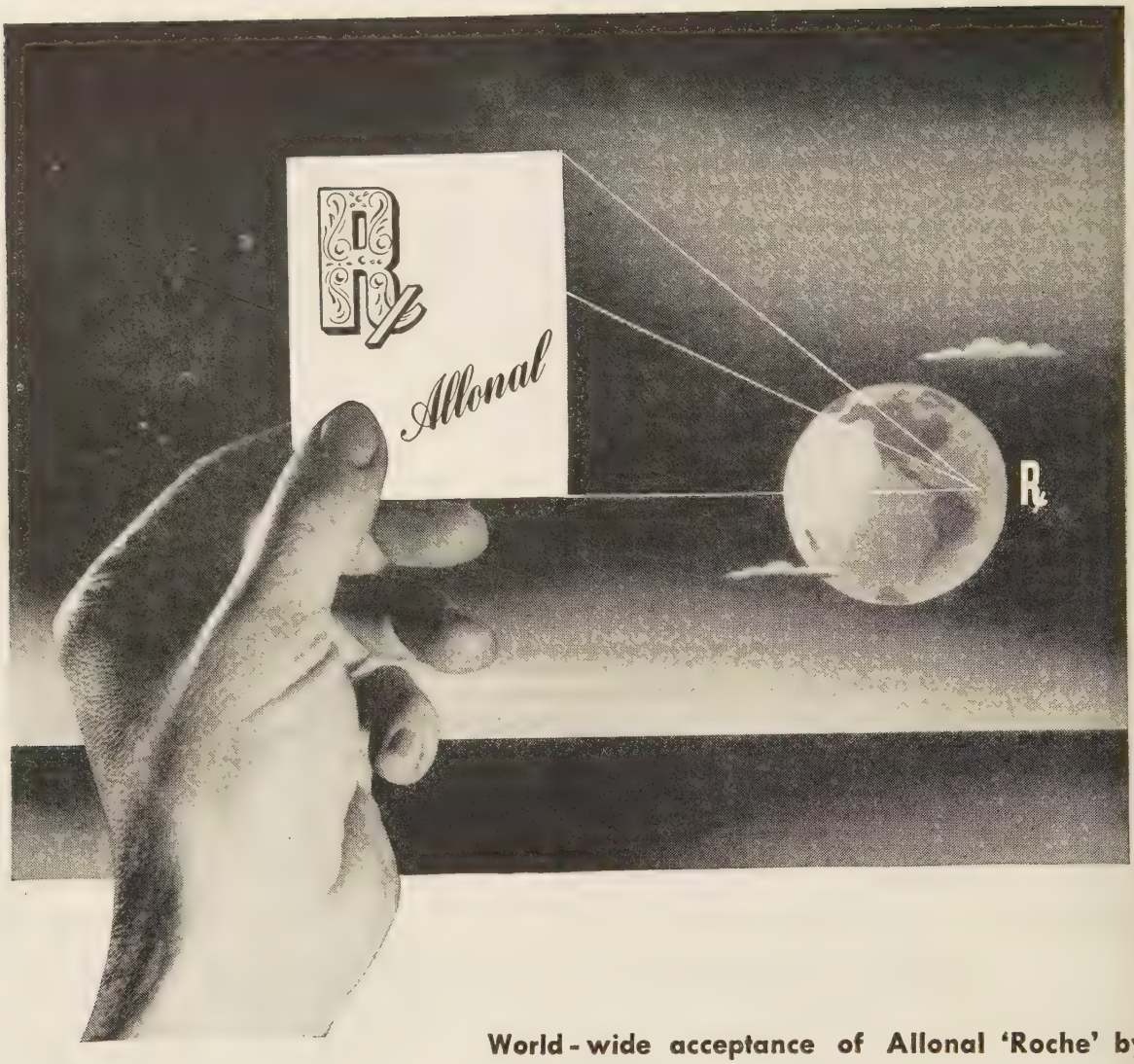

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THE THERAPY AND THE BASIC PRINCIPLES OF VARICOSE SYMPTOM COMPLEX RECTI*

WILLIAM FRANKMAN
Wollaston, Mass.

It was during the fall of 1934, while studying surgery at the Iselsberg Clinic of the Vienna General Hospital, that I was fortunate in being able to observe Dr. Blond's technique. The basic principle of this technique is that hemorrhoids, or "varicose symptom complex recti", are symptoms due to some abnormal or pathological condition higher up.

Dr. Blond, in his report, said that in over two thousand cases of hemorrhoids, which included about four hundred cases of fissures, over four hundred of pruritus ani, and about one hundred of fistulæ, he had obtained excellent results with the new injection method of treatment. The results of his work were published in various European medical journals, including *Wiener klinische Wochenschrift and Oesterreicher Arzt,* in the November 1934 and 1935 issues.

The medication used is sold in Vienna under the name of "antiproktan" and contains twenty percent quinine dihydrochloride as its chief ingredients. The formula is as follows:

Quinine dihydrochloride	gram	20
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Urethane hydrochloride	gram	14
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As has been explained, hemorrhoids are caused by a disturbance of the portal circulation, whereby a damming of the blood is brought about, causing dilatation of the rectal veins, or hemorrhoids. In persons who are overfed the liver is overtaxed, and in undernourished persons there may also be a disturbance of the portal circulation.

We find patients suffering from diseases such as hepatitis, duodenal ulcers, cholelithiasis, and cholecystitis which may cause the damming of the blood from the portal circulation into the hemorrhoidal plexus, and we find such patients also often suffer from hemorrhoids.

This principle explains simply and scientifically the causes of pruritus ani, scroti and vulvæ. Pruritus has always been a mystery or a problem, especially as to its biological factors, not only to the proctologist, but also to the dermatologist, and since the cause is not well understood it has never been treated scientifically. By some, fungi are believed to be the etiological factor, which may be true only if it is considered as a secondary infection due to the trauma of scratching. By treating this condition with local applications, internal medication, or the x ray, an already irritated condition was further aggravated, and all this without favorable results.

Others, who always attribute any unknown etiology to the sensitiveness of the nervous system, used alcoholic injections, and this treatment is still suggested in up-to-date medical text books on proctology. It is easily seen that since the purpose of the alcoholic injection is to desensitize the nerve fibers and thereby relieve the discomfort and pain of pruritus, it is not scientific treatment and the results are not permanent, because within a few weeks or months the function of the nerve fibers may be restored, and the pruritus, therefore, recurs.

When one understands that the underlying factor of hemorrhoids is the damming of the blood in the portal circulation, one can readily see what causes pruritus ani. The blood fails to reach the liver to be detoxified, and the toxin reaching the perineum causes pruritus ani, scroti and vulvæ.

In almost every case of pruritus, where the foregoing etiological factors exist, hemorrhoids, generally high-seated ones, are to be found by the use of a proper proctoscope in a good light. These high-seated hemorrhoids are generally overlooked by the surgeon and even by the proctologist who performs a hemorrhoidectomy, because such hemorrhoids cannot be reached by surgery. The socalled radical hemorrhoidectomies are by far more conservative than the injection treatment of hemorrhoids. This explains why there are thirty percent or more recurrences in hemorrhoidectomies.

Not only is pruritus ani a symptom of varicose symptom complex recti, but the same holds good for fissure and fistula in ano. The question is often asked, why do fissures refuse to heal? It is erroneous reasoning to blame the action of the sphincter, for we find fissures above the sphincter muscle. Why do these fissures refuse to heal? Some believe this is due to the uncleanliness of the rectum. This is also false, because we find that polyps and even hemorrhoids heal after operation. The answer becomes clear when a fissure is defined as a "ruptured thrombotic vein", because one can see then why fissures refuse to heal, for in order to bring about healing by granulation the walls of the broken

*Read for the first time in America before the medical staff of the Chelsea Naval Hospital, July 23, 1942, through the courtesy of the Bureau of Medicine and Surgery of the U. S. Navy.

down veins must be destroyed. This same basic principle can be applied to fistulæ.

We find fistulæ in cases of persons suffering from infected thrombotic veins. This condition may first come to the attention of the general practitioner or surgeon, by the manifestation of a perirectal abscess. When this abscess opens spontaneously, or is opened surgically, a fistula in ano generally follows. Of course, since the cause of the fistula is not known, or not well understood by the surgeon who opened the abscess, he has been criticized, many times unjustly, for the unavoidable complication. A fistula is the result of broken down infected veins, which form a track by their cords. Therefore, we now see that hemorrhoids are found in one hundred percent of the cases of fissures and fistulæ, and not, as some proctologists claim, in only forty percent.

When the principle and the etiological factors of varicose complex symptom recti are well understood, one can better understand how the treatment of this condition should be applied and successfully carried out. The success of the therapy is chiefly dependent upon four things: 1, the technique itself; 2, the instrumentation which consists of a specially designed proctoscope and with it a drop-method syringe which controls the medication to the smallest drop dose; 3, the proper medication, and 4, the correct scientific basic principle.

Of course, it is necessary to know how, when and where to inject. For the proctologist few words of instruction are sufficient, but for the general practitioner a certain amount of observation and actual practice would be absolutely essential in order to avoid unnecessary complications; and one must also know what to do if a complication should arise.

In hemorrhoids, six or eight injections given in a series of one each week will generally effect a cure, and about the same number will be necessary to cure pruritus ani. In fissures, one injection is all that is necessary; however, the high-seated hemorrhoids must be taken care of at the same time, after the fissure has healed. In fistulæ, from ten to fourteen injections are necessary to effect a cure. However, in all these conditions the patient generally begins getting good results after the first injection.

After I returned from Vienna in September 1935, I reported this technique for the first time in American medical literature. In my private practice and at the Boston Evening Clinic I was able to treat successfully about six hundred cases of hemorrhoids, about twenty cases of fissures in ano, about the same number of pruritus ani, and about five fistulæ, in all of which I can say there has been practically one hundred percent cure. As far as this technique is applied in the treatment of hemorrhoids, I can also say that I am now more than ever convinced that this method of treatment is today the last word in the treatment of "varicose symptom complex recti".

A general improvement in the patient's health is noted after even the first injection. It is truly remarkable how some of these patients, who give a history of constipation of long standing, or "ever since they can remember," will improve gradually, the constipation being entirely cured at the end of the course of treatment, and at times even after the first treatment. The same is true in regard to other symptoms such as abdominal gas, lower back pain, soreness or pain during stool, soreness or pain and burning after stool, blood in the stool, pruritus, a tired feeling even on arising after a good night's rest, insomnia and a general sluggish feeling, protrusion, sciatic pain, and nervousness. In a recent case of marked bleeding the bleeding stopped entirely after only two injections.

I shall cite a few cases, taken at random, from 1936 to 1942 in my private practice and clinic.

Case Histories

CASE I.—March 25, 1939. A. B., male, aged twelve years. The chief complaint was constipation, marked since birth. The patient took two tablespoons of Russian mineral oil daily; he suffered occasionally from pain in the abdomen. I suggested to his mother that she bring him to the office for a physical examination. He weighed 134 pounds. His general condition was normal, but he was obese, flabby, and his skin was sallow or clay-colored. A rectal examination disclosed no protrusions, and there was no history of bleeding. A proctoscopic examination showed distinct high-seated hemorrhoids. This patient received eight treatments at one week intervals, and he gradually reduced the dose of his laxative until he stopped it altogether. At present, over three years after the treatment, he uses no laxatives and feels well.

CASE II.—May 30, 1939, C.O., aged fifty-three years. The chief complaint was protrusion and marked rectal bleeding. The patient's general condition was good aside from essential hypertension. He had been operated upon in 1927 for hemorrhoids, and had also been treated for hemorrhoids by a well known proctologist, who gave him twenty injections. The patient complained for some time of numbness of the lower extremities and a neurological examination was advised by his family doctor. This examination proved to be negative. It is interesting to note that after nine injections at the office, the bleeding and protrusion entirely disappeared. However, two more injections were given to assure one hundred percent cure. At the same time the numbness entirely disappeared.

CASE III.—September 12, 1938. M. G., aged forty-five years. The patient's condition was good except for a slight hypertension, but for over a year the patient had complained of pruritus ani, for which he was operated upon by a well known surgeon, who dilated the sphincter and cauterized a fissure with silver nitrate under spinal anesthesia. Apparently hemorrhoids were not found, or at least not noted. The patient felt slightly relieved for a short time (three weeks), then the pruritus recurred. Upon examination at the office, I found high-seated hemorrhoids for which I treated him, and also gave local injections for the pruritus. The patient received a regular course of treatment. At the last treatment, on May 5, 1939, the patient stated the cure was ninety-six to ninety-eight percent complete.

CASE IV.—December 11, 1937. Mrs. C. W., aged forty-four years. The patient's chief complaint was constipation, with pain after defecation and in the coccygeal region, and a tired feeling in the morning. Upon examination, I found fissure in ano. I injected the fissure under local anesthesia, and seven days later the fissure was completely healed and the patient was free of symptoms. This patient was treated about five

ears ago. It was difficult to convince her that though he fissure was completely healed, there were still emorrhoids present that should be treated. She said hat since she no longer had any symptoms there was o reason to treat the hemorrhoids.

CASE V.—July 14, 1937. Mr. A. K., aged thirty-five. he patient's history showed that about five years ago condition existed which he thought was a boil or an bscess. It did not bother him until it started to dis-

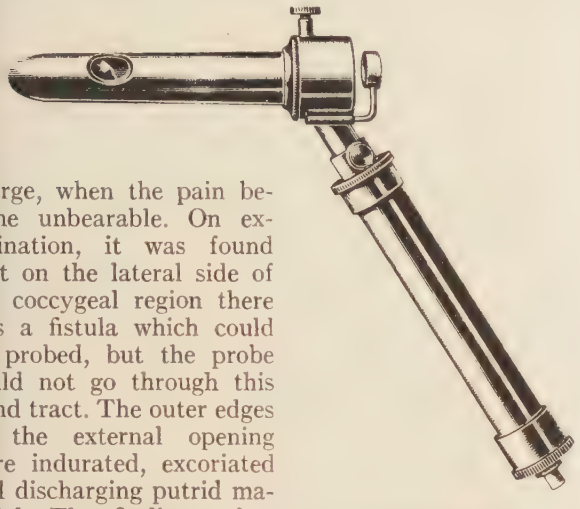

Fig. 1. Proctoscope

harge, when the pain became unbearable. On examination, it was found hat on the lateral side of he coccygeal region there as a fistula which could e probed, but the probe ould not go through this blind tract. The outer edges f the external opening ere indurated, excoriated nd discharging putrid material. The findings of a eneral physical examination were negative, and a diagnosis of ischiorectal fistula was made. Upon rectal examination it was found hat the patient had severe internal hemorrhoids. Apparently this patient had an ischiorectal abscess, which pened spontaneously and formed, so to speak, a blind istula. In this case, as in other similar ones, the patient was treated for hemorrhoids in conjunction with he treatment given for the fistula. He required seven-een injections before he was discharged as cured, over ve years ago.

CASE VI.—December 6, 1938. Mr. E. H., aged thirty-ix. The chief complaint was protrusion, with laxatives sed every other day, and a tired feeling. He was getng ready for his physical examination for advancement in the Army, and the protrusion would bar him hen it was discovered by the Army doctor. After the ixth injection the protrusions entirely disappeared. He ceived in all about ten injection. The patient chieved his aim, and now reports that he rarely uses xatives.

CASE VII.—June 25, 1938. Mr. F. W. H., aged fifty-vo. The chief complaint was sciatic pain on the right de. He had had an operation for fistula in ano five ears previously, and it apparently was healed. Examination revealed internal hemorrhoids, for which he reived thirteen treatments, and the socalled sciatic ains disappeared after the third treatment. This case lustrates the relation of a fistula in ano to hemorhoids, which is generally overlooked; also the referred mptom of a sciatic nerve pain which is often treated s regular sciatica without results.

CASE VIII.—May 3, 1942. M. G., aged thirty-two. he chief complaint was pruritus vulvæ, with constipaon occasionally. Pain in the lower back and belching gas were other symptoms, but these were of minor nportance to the patient. Physical examination, urine analysis, Wassermann tests and vaginal smears were all negative. Rectal examination revealed high-seated hemorrhoids, and for these the patient received six treatments at weekly intervals. After the fifth treatment the chief symptoms of pruritus vulvæ were improved and the minor symptoms had disappeared. This case illustrates how any of the above mentioned symptoms of pruritus vulvæ may sometimes be treated without favorable results by the dermatologist, gynecologist, or endocrinologist. However, a proper rectal examination may at times disclose the correct etiology of the pruritus vulvæ.

Each patient is instructed upon discharge to return in six weeks for a routine check-up, again in six months, and again six months later. Those who fail to appear I assume to be well, and this has been proved by personal contact and by telephone.

It is true that there were some cases which were not successful, particularly when my experience with the above mentioned technique was limited. However, it would be neither fair nor just to the technique or to its originator to mention or report those isolated cases. For these failures almost without exception were due to either of two causes: not carrying out the technique properly, or lack of complete cooperation on the part of the patient. Therefore, since this is the report of a technique, one is justified in reporting only cases where the technique was carried out properly with the full cooperation of the patient.

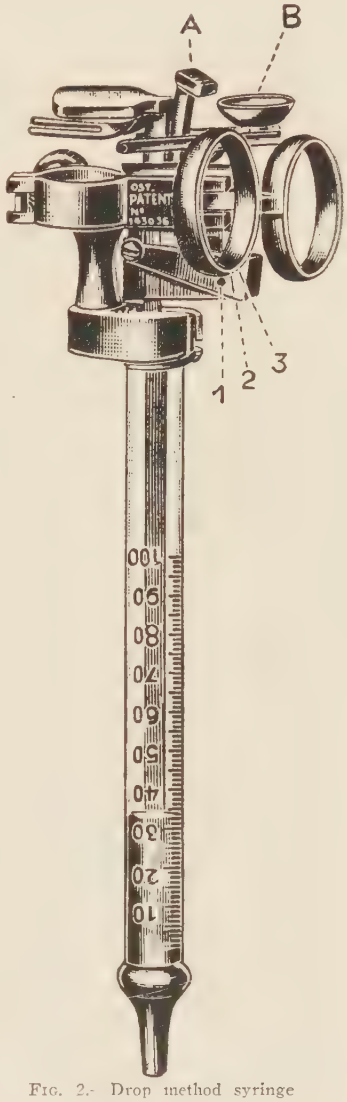

Fig. 2.- Drop method syringe

Description of Technique

The technique may be described briefly as follows: In hemorrhoid, four to six drops of the solution are injected submucously into the mass of the hemorrhoids at the upper lip of the window of the proctoscope in four to six different places, one drop at a time.

Fissures, irrespective of their depth and whether acute or chronic, are injected submucously at the base of the fissure, using about three to four drops, at three or four different places. Rarely is it necessary to inject more than once.

In fistulæ, the inner opening of the blind fistula is

traced with methylene blue and at the place where the blue is noticed the fistula is injected, using the same technique as for hemorrhoids, for a fistula has always been the origin of a hemorrhoid. Then inject in the canal of the fistula, about half a syringe full of the solution about once a week, from ten to fourteen treatments being required in the average case of fistula.

Pruritus ani is generally cured after the high-seated hemorrhoids have been injected successfuly. However, in obstinate cases several injections of about one drop each are given submucously at the perianal region at the upper or lower half in a spoke wheel like shape, one region at weekly intervals.

The injections in these places are not for the purpose of desensitizing any nerve, but are used as chemical or surgical ties to those perianal capillaries or blood vessels which contain the toxin causing the pruritus. Since those blood vessels are tied up and the hemorrhoids are sclerosed or obliterated, collateral circulation with fresh blood without toxin is established, and thus the pruritus is cured scientifically, hence, permanently.

Although the technique of the treatment is simple for the proctologist and surgeon, the general practitioner needs some experience and training in order to learn how to recognize the pathological conditions, also when, where and how to inject, and the proper use of the proctoscope. Also, I wish to say that although this treatment will not cure every rectal condition, for example, polyps, papillæ and thrombotic veins, in which surgery is absolutely necessary, yet with this method of injection many useless operations could be prevented and the expense and loss of time avoided.

The proctoscope (Fig. 1) is about ten centimeters long, which is long enough to detect even the most highly seated hemorrhoids which fall in the side window at the end of the instrument. With the proctoscope a drop method syringe is used in order to control the medication to the smallest drop dose. This proctoscope contains batteries which supply its light.

The drop method syringe (Fig. 2) is composed of two parts; the frame, which is made of metal, and the glass syringe proper which can be released from its frame for sterilization; 1, 2, 3 indicate how to regulate for one, two or three drops. By raising part A the solution is run into the glass tube, and by pressing down on point B one, two or three drops can be injected, according to the regulated position.

The medication and instrumentation will be available in the United States after the war.

736 Hancock Street

DRUG PRODUCTION IN NEW YORK AND ADJACENT STATES

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By invitation from the New York Academy of Medicine in May, 1941, I discussed the problem of drug plant production in the United States, before a meeting of the combined committees of the Academy on the drug shortages due to the war affecting our normal importation sources. The possibility of a serious curtailment of the supplies of many drugs besides morphine and quinine became obvious. Among such items were the numerous insecticides and rodenticides used in public health control measures. The insecticides were of such importance to agriculture that the farmers were given priority over the physicians for their requirements. Supplies were available in existing stocks in sufficient quantity to meet normal trade demands for a period varying from a few months up to three years.

Now, approximately three years later, reserve stocks have not been entirely depleted due to some federal control of distribution, increased production on the part of commercial growers, and by some importation in spite of war conditions. However, the present supply of botanical drugs, insecticides, and rat poison (protection against bubonic plague which has already appeared on the Pacific coast) is far below normal and will remain so for some time probably, because of the scorched-earth policy in war areas and the labor shortage in the nurseries at home. It is the purpose of this paper to report the present situation regarding the extent to which certain common drug plants were cultivated during the 1943 season by growers other than large commercial botanical drug concerns; and, to note how much material (plants or plant parts such as seeds, bulbs, rhizomes, etc.) is available for propagation during the 1944 season. The territory surveyed includes the states of New York, New Jersey, Connecticut and Massachusetts. The number of nurseries in this area totals 2,195. The distribution numerically is as follows: N. Y. State 1159; N. J. 396; Conn. 331; and Massachusetts 309.

Prior to a consideration of the possibility of growing drug plants which have never been grown in this area of the United States, it seemed desirable to determine the extent to which a few common plants of medicinal significance, and known to be ecologically adapted to this region, are actually in cultivation at present. Such data would answer several interesting questions including the basis for estimating the amount of crude drugs which could be harvested upon demand in any given year from current sources previously unused; and, to learn approximately how much material (seeds, bulbs, rhizomes, etc.) could be collected for increased production in 1944 if conditions warranted such an effort.

During 1942 and 1943 I visited as many as possible of the two thousand nurseries and made contact by mail with a large percentage of the remainder by means of a questionnaire. Synthetics are not affected by the war to the extent that normally imported plant drugs are reduced. A number of these naturally occurring drugs are still of great value and general use. A representative list of ten drug plants from Gathercoal's (1, 2, 3) list was chosen from plants producing compounds covering a variety of medicinal applications; and, a group of plants in which the therapeutic principles are derived from very different organs of the plant —a consideration of significance in their propagation. The Linnaean species included in this preliminary survey are as follows:

Botanical Name	*Common Name*	*Part Used*	*Medicinal Use*
Aconitum napellus L.	Aconite or monkshood	Tuberous roots	Cardiac depressant, anodyne, sedative.
Aloe vera L.	Barbadoes aloes or bitter aloes	Inspissated leaf juice	Laxative, cathartic, purgative; relief from x ray burns.
Atropa belladonna L.	Belladonna or deadly nightshade	Leaves and roots	Narcotic, mydriatic, nerve sedative, diuretic, anodyne.
Convallaria majalis L.	Lily-of-the-valley	Rhizomes and roots (flowers and leaves also have physiological action)	Cardiac stimulant, diuretic, properties similar to digitalis.
Datura stramonium L.	Jimson weed or thorn apple	Dried leaves and flowering tops	Sedative, anodyne, deliriant, depressant, mydriatic.
Digitalis purpurea L.	Purple foxglove	Dried leaves	Cardiac stimulant, diuretic, emetic.
Hyoscyamus niger L.	Black henbane	Dried leaves with or without tops	Sedative, narcotic, deliriant, anodyne, mydriatic.
Salvia officinalis L.	Garden sage (spicy oil to mask unpleasant tastes of medicinal preparations)	Dried leaves	Tonic, stimulant, astringent, aromatic, bronchial affections.
Urginea maritima (L.) Baker	Squill or sea onion	Bulb	Red variety is an emetic and rat poison (rats cannot regurgitate). White variety is an expectorant in small doses and a cardiac drug in large doses.
Valeriana officinalis L.	Common or garden valerian	Rhizomes and roots	Nervine, antihysteric, antispasmodic, alterative.

The results of the questionnaire showed no cultivation (outside of experimental research institutions) of belladonna, Barbadoes aloes (which has a very important modern use in the amelioration of x ray burns), jimson weed, black henbane, nor of red or white squill. The percentage of nurseries, in the four states surveyed, which reported the cultivation of *any* drug plants at all, whether listed on the questionnaire or in addition to the list of ten, varied from four percent to twelve percent for the different species. Twelve percent of the nurseries had one or more species of drug plants for sale. Lily-of-the-valley was offered by fourteen percent, valerian by ten percent, purple foxglove and sage each by eight percent, aconite by four percent, and other drug plants, such as colchicum, not on the list of ten, also by four percent. There is no cause for alarm if the commercially grown digitalis crop should fail because the Pacific Northwest could supply all United States requirements. But we have more than United States demands to consider in this global war. The only species reported in actual numbers of individual plants over five hundred were sage, valerian, and lily-of-the-valley. Many letters indicated only one or two individual plants of the other types. The greatest number of any species reported was three thousand Convallaria. The largest variety of drug plants is to be found in the Arnold Arboretum, the New York Botanical Garden, the Brooklyn Botanic Garden (4) and the Boyce Thompson Institute for Plant Research, Inc. Such organizations, however, are not in a position to supply seeds or parts of medicinal plants except for experimental work. Their living collections are primarily for demonstration and research.

An analysis of the data covered in this survey indicates clearly that there are very few drug plants now under cultivation in the nurseries of the States of New York, New Jersey, Connecticut, and Massachusetts. Obviously, no considerable supply of seeds or other parts for propagation could be collected upon short notice if the medical profession should issue a request for an immediate increase in production. It would require at least one year to grow plants enough to provide a supply of material for any appreciable increase in acreage during a second year. Moreover, some species would require several growing seasons to mature rhizomes or roots large enough to be of a useful size.

In a few instances, the larger pharmaceutical organizations increased their acreage of a few drug plants as much as one thousand percent two years ago when importation difficulties became apparent. It is true also that in some cases, such as aconite (5), approximately twenty to thirty acres of the properly cultivated Sparks

variety yielding five hundred pounds per acre could provide a sufficient supply of the crude drug for the annual needs of the United States. In other cases, however, such as red and white squill, the current supply is practically nil, as the only supply in the States covered by this survey is a very few plants in the possession of those plant research institutions referred to above. Such material is not immediately available for commercial utilization.

Only one third of the nurseries showed a willingness to undertake any increased or new production even if guaranteed through federal aid that their yield would be harvested at a profit. This is due to the acute labor shortage. In order to protect the public from the possibility of a critical shortage not only in certain minor but effectively useful crude botanical drug sources, including insecticides and rodenticides, it would seem to be desirable to encourage permanently at least a small annual crop of several of these plants which can be cultivated successfully in this region. Two thousand nurseries exist in this northeastern area. Encouragement to some of these nurseries by the consumers should prove to be advantageous and profitable to all concerned and alleviate our dependence upon importation currently and in the future. One bright spot is to be found in the report by Sonnedecker (6) that the U. S. Bureau of Plant Industry, cooperating with the Bureau of Narcotics, has information on our ability to produce opium. Suitable seeds are available to assure enough morphine production for both military and civilian needs, should the war shortage become critical.

Bibliography

1. GATHERCOAL, E. N.: *Jour. Am. Pharm. Assn.*, Pract. Ed., 2:102-109, Mar. 1941.
2. GATHERCOAL, E. N.: *Bulletin*, National Formulary Committee, 10:243-251, 1942.
3. GATHERCOAL, E. N.: *Drug and Cosmetic Ind.*, 51:264-272, 319, 1942.
4. BALLARD, C. W., CHENEY, R. H. and POKORNY, F. J.: *Brooklyn Bot. Gard. Record*, 32:187-209, July 1943.
5. BONISTEEL, W. J.: *Jour. Am. Pharm. Assn.*, Sci. Ed., 29:404-408, Sept. 1943.
6. SONNEDECKER, G.: *Science News Letter*, 214-215, Apr. 3, 1943.

TREATMENT OF MÉNIÈRE'S SYNDROME*

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The treatment of Ménière's syndrome by the intravenous administration of fifty percent solution of magnesium sulphate, in doses of four to five cc., has proved effective in my hands. The first trial case had been refractory to other methods of treatment, which included probing of the eustachian canal, the use of ammonium chloride and nicotinic acid, and the intravenous adminstration of histamine, in accordance with the method of Miles Atkinson, of New York.

The patient was a man seventy years of age, a mechanical engineer, and actively engaged in work. He had for some time been suffering from mild epileptiform attacks, which occurred weekly. Several times a month, however, these attacks had been severe and serious, causing the patient to strike out without warning, and were seemingly about to disable the patient entirely. The first dose of fifty percent solution of magnesium sulphate, administered intravenously, relieved the patient of all symptoms, and there has been no recurrence over a period of three months.

In obtaining favorable results by the use of magnesium sulphate, my experience with it has taught me that not only should the drug be administered very slowly but also in divided doses, preferably two to two and one half cc. at a time in one vein, thus making it unnecessary to extend the time of administration over two and one half to three minutes.

It is unsafe to exceed one cc. of the fifty percent solution per minute, and only a small caliber needle, No. 25 or 26, should be used. However, the entire amount of the dose in one vein, two to two and one half cc., must be completed by the end of two and a half to three minutes at the most. The second portion of the average dosage, two to two and one half cc. (four to five cc. total) may then be administered in like manner, but a different vein should be selected. Only by this means may a severe, painful and disabling reaction (local) be avoided. The larger the vein used the less tendency to local reactions.

Untoward reactions were experienced when the period of two and a half to three minutes was exceeded from the time the administration of the solution first entered into the vein. When the drug is being administered, a clock or watch should be in view for exact timing.

The patient is instructed to describe, during the giving of the solution, the amount or degree of warmth he experiences, e.g., the warmth noted in the roof of the mouth, in the tongue, breast, abdomen, genitals, and lower limbs, progressively, which is about twenty seconds slower when the solution is thrown slowly into the vein. As soon as the warmth is said to be lessening the administering may be resumed after stopping momentarily by the operator. The pulse and respiration are watched all of the time during the pauses, waiting for the warmth to subside.

This paper is written particularly to advise, when using this method of treatment, to avoid local reactions within the veins locally, and to warn against the improper use of this drug, which is very dangerous when used intravenously. Great caution is necessary to avoid fatalities. The use of a calcium salt will, it is asserted, neutralize the effects of magnesium sulphate; e.g., one cc. of a five percent solution of calcium gluconate will instantly counteract. it.

H. J. Stander states that magnesium sulphate, in doses ranging from 0.05 to 0.49 gm. per kg. of body weight, intramuscularly, or intravenously in ten or twenty-five percent solutions, did not produce any marked changes in the blood but did so in the liver and kidneys.

Again, caution is necessary. Magnesium sulphate in solution in overdosage can cause instant death.

531 WEST WISCONSIN AVENUE

*After the work of Alfred Schick, of New York, and reported by Julius Baer in *Archives of Laryngology, Rhinology and Otology*, 52:1, 1943.

Symposium on Neuropsychiatry

ADEQUATE TREATMENT OF PSYCHONEUROSES

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The neurotic invalid has always been a bugbear to both general practitioner and specialist, and until our own time, even neurologists have been equally at a loss as to the treatment. The reason for this has been the muddled incoherence of the accounts of pathogenesis as dealt with in the older texts concerning the psychoneuroses. Only a few teachers had any clear idea, for example, of such a simple problem as the socalled traumatic neuroses (1), and still less of the complex genesis of the besetting or compulsory type of neurotic expression (2). The relatively simple hysterias were customarily treated merely symptomatically. The most conspicuous effort to do otherwise was that emanating from Freud and his followers; full of redundant hypotheses, impractically time-consuming, frequently augmenting the patient's maladjustments by adding to his outlook socially undesirable orientations confessedly applicable to only a few, and infrequently successful therapeutically even then.

More practical perhaps were the conceptions and procedures of Adler. But they too suffer from inadequate perspective, attributing all neuroses to the sense of inferiority, a conception borrowed from Janet who had called it "sense of inadequacy". Jung went still further, postulating a tribal unconscious, inherent in the patient's protoplasm itself, leading to behavior mediated by instinct like that of the invertebrates. The fetich of "the unconscious" was the sun around which were constellated these three systems.

None of those one-sided theories has led to such fruitful practice as has the principle of "conditioning", based upon physiological experiments, which the followers of Pavlov have extended to the more complicated associations of self-conscious man. (Hull, Hillgard, Marquis and other American psychologists.)

A familiar instance of a conditioned response is the smell of a rose recalling a pleasant emotional episode in a garden where roses bloomed. An unpleasant occurrence, as of being bombed, may be recalled, with its accompanying blanching, quickening of the pulse, halting of the breath, and other reactions of fear, by the bursting of a tire or by other sudden noises.

Association of *ideas* was John Locke's interpretation. Now we know that movements, secretions and upheavals of the circulation always occur also. Sometimes, indeed, the prevailing idea is the mere sense of these physical changes. On the contrary, the mere recollection, (i.e., an idea) may induce an emotion in one person which would not occur in another person encountering the idea which might seem exactly the same.

What, then, is the difference? It lies in the conditioning of one person to an element of the situation represented by the idea while to the other person that element is indifferent. He may not even notice it. Even the person conditioned favorably may not notice explicitly the conditioning element. It is this feature which has led some to postulate the theory of the unconscious so sensationally exploited a few years past.

It is the art of the psychotherapist to teach his patient, to bring into focus many an unnoticed element in his faulty conditioning. These unfocussed elements may be compared to the undeclared steps in reaching a conclusion by intuition, and to the failure of argument to bring before the bar essential features which act upon oneself, but are so taken for granted that they are not uttered. They are, however, brought out readily by questions in the socratic manner, and much more slowly and clumsily by the free association method of Freud, the hypnotic method of Bernheim, Janet and others, and the associational method of Jung. Any of these methods will reveal the history of the conditioning of a sequence of which the patient is unaware even though he may recollect perfectly the facts and incidents concerned. This is because he is ignorant of the import of stimuli which affect him psychologically.

For example, a healthy young woman, violently agoraphobic, could not connect her fear of crossing the street with the oppression in a crowded church she had felt four years before. Conditionings by fear of burglars, by the noise of a street car, by fearfulness of a mother, by intimidation by a father, by disrespectfulness by his family, by behaviour of companions toward faulty utterance, etc. are described in *Dreads and Besetting Fears.*(3). Healthy conditioning was affected in these and other maladjustments without any reference to hypothetical doctrines of repression into unconsciousness or to sexual symbolisms. When such impressions are annoying enough to disturb one's own comfort, or to make one give inconvenience to others, we call them morbid. They can be reconditioned to cease disturbing oneself or others.

Better still they can be prevented (i.e., mental hygiene). Conditioning of course implies a physical change in the nervous system. It may be likened to the tracks of wild animals through a virgin field. The pressing down of the verdure induces an animal to follow again that path, but if he does not do so before the springing up again of the grass he may follow another path if he hears, sees or scents an attraction; repeated pressings down, however, leave permanent trails. So in the nervous system. Even when the trails lead to sterile or damaging ends, they continue to be followed. To blaze a new trail is regarded as a feat to be admired, so difficult is it recognized to be. The Gordian knot which Alexander cut was a confusion of trails leading nowhere.

Running up a sterile or damaging trail is the trouble of the psychoneurotic person. Psychotherapy condi-

tions him to follow the fruitful trail, if such exists, or if not, to avoid the frustration of following the hurtful. Mental hygiene indicates the hurtful trails to avoid and points the way to those ways which lead to fruitfulness.

The case which follows illustrates one procedure which succeeded.

Life-Long Phobia Cured in Two Weeks

A lawyer, twenty-eight years old, gradually withdrew himself from the society of friends, later denying himself to all but one. He abandoned work and began to neglect food. At night he would pace the floor for hours. He looked haunted and ashamed. *He twice took steps toward suicide.* There is no need to enlarge upon a picture so familiar. He was most distrustful of the possibility of cure, as he had six months previously visited specialists who had failed to benefit him. As he described it, their procedure seemed to have been somewhat crude attempts at hypnosis with suggestive assertions denying his symptoms and their cause, which he had declared to be a state of fear.

It was mainly in the presence of other people that his fear came over him; and he was ashamed all the time because of his fear. It was quite different from the timidity of adolescence. As a small boy he was noted for his bravery, and would fight against the boys of the neighborhood. The cause of his fear was unknown to him, and he believed it was hereditary, as one of his brothers was worse than himself and had become a wanderer whose whereabouts would be unknown for months at a time. The patient had been fighting against this fear at least since his college days; he had tried playing football to make him courageous but without effect; and so when he graduated he plunged into a camp of rough lumbermen and took his part as a laborer with the rest. Six months of this gave him still greater admiration for courage, but in nowise improved his own. He then returned to civilization and plunged into his studies and office work, hoping to attenuate the fear which gripped him; but instead of this he gradually lost mastery, and after six months of struggle fell into the state in which he was brought to me.

Genesis.—After a physical examination, which disclosed no important features, except a loss of forty pounds and a high degree of erythism, psychological exploration was begun by my stating to him either he was, as he believed, a physical degenerate or there was some psychological cause for his fear; in which latter case the discovery of that cause might lead to the finding of a means for its removal and the ending of his fear. He was then told to search his memory for fear-bearing experiences in early life, but could think of none. Then period by period, running back from his college days, had attention turned upon it; until the patient recollected to have been morbidly fearful at each time; until finally he declared that he had always been afraid. He was then asked what incidents of his early childhood had particularly frightened him, and at first recollected nothing. Wild animals, darkness, fire and people were each in turn presented as possible factors. But it was not until the remembrance of a near relative was recalled that the key of the situation was found. It seemed that this individual's idea of upbringing was the hardening process, and that the theory he held was that every boy's moral welfare required the knowledge of fear. These two objects were combined in such a procedure as throwing the lads into the water while they were unable to swim, to fish them out only when they were going down almost breathless. In winter, a favorite method was to throw the boys while asleep in the morning into a bank of snow and snowball them home to the door. Another procedure was to chase the children with a stockwhip from the front door to a tree in the distance. The result of this was not hardening, but a breeding of chronic fear in these two lads. The patient's recollection of these performances reached back to the age of four. But he had completely put out of his mind these incidents, and indeed failed to take into consideration his cowardice as a young boy, believing it to have originated in the high school.

Treatment.—When the source of the fear was discovered, the patient declared that he did not see how this knowledge would benefit him. It was then explained to him that his fear was merely a psychic habit and not an instinctive reaction. He was told that habits can be reformed if intelligent effort is employed but that he was in no condition to begin reformation of habit until he had slept and eaten regularly for some days. When he objected that he had long since given up narcotics, as he was worse than before taking them, he was told that I *never found it necessary to give narcotics;* that I would induce sleep without them, and that after this he would be less unwilling to eat.

Accordingly, treatment was begun by my visiting him in bed and hypnotizing him into sleep. He slept eighteen hours, and then carried out the dinner program we had previously arranged. Hypnosis was performed three times in all, but not on consecutive nights.

In the meantime re-education had begun. To make a long story short, this consisted merely of a reconstruction of the fear situation of his infancy, and the pointing out of the non-necessity of the fear sequence which had occurred, and the insistence upon the possibility of reconstruction of his reactions towards himself and the world. Numerous instances of the dependence of emotion upon idea were given; and he was instructed concerning reconditioning the reflexes as investigated by Pawlow and Crile; and he was shown the physiological perniciousness of the fear impulse.

He struggled with the situation bravely; but I left him alone after what proved too short a period, namely, four days; and he lost courage and began to relapse, until a friend drew my attention to the situation after a week. We then resumed relations, as he felt the need of help. After four more days of re-education, the tide turned and he obtained control of his fear. He celebrated the occasion by an impressionistic account of his situation, from which I extract what follows:

"I've won! I've licked him! I've driven away the beast that was driving me mad. As soon as I knew just what he was, and how he came, I poked him with my finger, and he busted. He's not gone entirely; he's crouched, growling, nearby, waiting to jump on me again. And occasionally he gives me a twinge, such as some men get when passing a looking glass. I laugh at it. I'm on my back no longer; I'm fighting now. And my battle is all but won. I wrote my last letter on Friday. Yesterday I had fun. I got up singing in the morning, dressed carefully and went down town. I ate my breakfast slowly, but made the waiter scurry. I roamed the streets. A week ago I slunk into a restau-

rant, because I was fearfully hungry, unshaven, and unkempt, and the waiters all laughed at me, and I hurriedly gobbled my food and crept, trembling, out again. I went back there yesterday and bullied the whole crowd. One of them came up grinning, and I looked him in the eye, and the grin changed to a smirk. I kept him standing waiting, while I read the menu through. And I said, 'Bring me this and that,' and, 'waitah, hurry! and don't you dare not to do so.' Ten days ago I sneaked up to the Sherman statue, by moonlight, and looked at the statue of a soldier longingly, and wondered how he could be. Yesterday I walked up to him laughing and wished I could shake his hand."

Reaction.—For *fifteen years,* since the foregoing account was written, the patient had successfully practiced his profession and was still happy not to say buoyant. At first, indeed, he was so expansive that I suspected a periodic psychosis, in which my intervention was a mere coincidence; but that that was not the case seems to be shown by the gradual subsidence of the extravagant behavior which the patient at first showed. Besides, another case came to my attention wherein no such doubt could arise. It was that of a woman of twenty-eight whose vision was restored by removal of congenital cataract. Dr. Reid Russell, of Asheville, N. C., the operator, informed me that the patient's reaction was almost maniacal in her joy at her new sensations and at her unaccustomedness to the adaptations they required. So I interpret this young lawyer's extravagance of behavior to his incapacity at first to adjust himself to the new manner of looking upon the people who surrounded him, his former ever-present dread having been displaced by a disregard almost contemptuous, with a consequent effervescence of the ego, disconcerting to those who knew him before.

Interpretation.—1. The case illustrates the *chronic anxiety state,* the cause of which was not the kind of disturbance which is supposed to be essential by the followers of Freud, but was due to an emotional habit directly traceable to influences of childhood. In the patient's mind the connection between the circumstances which created the fear, or the fear itself, was not adequately realized.

2. The morbid emotional state emanated directly from the ideas which commenced in childhood.

3. The revelation of the mechanism of the disturbance was not sufficient to cure it, for restoration to health was necessary to conduct a restraining of the patient's attitude of mind. For this, several days were required wherein there was a summation of ameliorative stimuli derived from the persuasive discourse of the physician. Part of this was during the induction of sleep by the method of hypnosis.

4. These procedures were tantamount to what is known in psychotherapy as re-education and what is called by physiologists reconditioning. The principle was merely that of changing the associations to ideas so that the painful aspect shall not predominate, whereby disagreeable, distressing, painful emotional states are substituted by pleasurable, or at least, indifferent effects.

A warning is required against attributing to psychogenesis vegetative syndromes and their emotional sequelæ which are caused by endocrine or other chemical agents. Much vain and fruitless psychotherapy is harming such patients and discrediting medicine. The untrained should not attempt to differentiate much less treat cases of autonomic imbalance. The psychosomatic cult is in danger of the former excesses of psychoanalysis at the hands of untrained enthusiasts.

References

1. Williams, Tom A.: Traumatic Neurosis and Babinski's conception of hysteria, med. rec. 76:14 (Oct. 2), 1909.
2. Williams, Tom A.: Traumatic neurosis. *Am. Jour. Med. Sc.*, 1915.
3. Williams, Tom A.: Phobias, *Int. Clinics*, 1920. Dreads and Besetting Fears, Little, Brown & Co., 1928.

THE PROBLEM OF STERILIZATION OF THE MENTALLY UNFIT

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The problem of sterilization of the mentally unfit is an extensive subject which cannot possibly be covered in one short paper, but an attempt has been made to present some of the more interesting phases of this public health measure. There are various factors to be considered. We are concerned with the who, why, when, where, and how, of the sterilization procedure, and we must also consider the differences of opinion governing the expediency of the measure. As a corollary to this, there are the data purporting to demonstrate the importance of the problem.

The public at large is well aware of the publicity given to such dreaded diseases as tuberculosis, venereal diseases, and poliomyelitis. Oddly enough, however, the public is not or seems not to be aware of the scourge of mental diseases and inadequacies. It seems that the main reason accounting for this is the deficiency of information or the complete lack of dissemination of information among the people. If we grant the veracity of this claim, it is certainly evident that the problem of sterilization has not been publicized, so that the average person regards the subject as a pleasurable topic of conversation rather than a vital reality which must be reckoned with.

The fact must be acknowledged that many people believe the greatest hope in the control of mental deficiency or disease lies in the field of contraception and birth control (1). Nevertheless, the authors who grant the existence of this viewpoint assert that sterilization offers "one of the most hopeful means for the decrease of reproduction of the unfit". Dorcus and Schaffer (1) mention, too, that the constitutionality of the process in many states is in doubt so that we have here the greatest barrier to its helpfulness in the problem. Attention should be called to the fact that this statement was published in 1937, whereas the implications bear scrutiny owing to modifications in the accuracy of the claim as examined in 1943. The accompanying table with statistical information, followed further by data to be presented later in the paper, will indicate that the statement needs to be modified to some extent.

Myerson, in Rosenau's textbook (2), states that the

propagation of mental defectives can be controlled effectively by sterilization. Consulting Strecker and Ebaugh (3) we find the statement that sterilization is of aid in preventing mental deficiency increase "but it is scarcely the panacea that eugenics supposes". With the admission that different persons make different estimates of its value, these authors mention the view of Penrose (4), that the incidence of mental defects would be lessened by only five percent if sterilization were employed. "This is based on the assertion that only five percent of the defectives have one or the other defective parent." Noyes (5) concurs with Strecker and Ebaugh by remarking that "... no one any longer regards it (sterilization) as a panacea", and he states further that there are differences of opinion concerning its value and the "wisdom" of employing it. Additional comment, such as "in some instances sterilization may be of individual or eugenic value", tends to weaken the entire proposition although of course it constitutes no abrogation.

Sadler (6) is more specific when he says that sterilization should never be advocated in doubtful cases or in milder or more questionable forms of defectiveness. It would be suitable, however, in unquestionable cases of feeblemindedness which might be manifested in the form of criminality, imbecility, or other forms of hereditary defectiveness. Sadler goes on to say there is no question that a sterilization law enforced throughout the country would eliminate a large amount of crime, insanity, feeblemindedness, moronism, abnormal sexuality, and other forms of defectiveness and degeneracy all in less than one hundred years. The first portion of this claim is of definite interest because of its scope, but the second portion is dazzling beside the percentages proffered by Penrose (7).

As a diversion from the more eugenic aspects of the procedure we read the view of Sheldon and Ziegler (8) who are interested in the marriage problem of mental defectives. They state that sterilization may be used in some cases to help the subjects defend themselves against responsibilities which they cannot carry. Interestingly enough, in a discussion of the material presented by Sheldon and Ziegler, Dr. Lawrence Kolb (9) states that some statisticians avow that if all the feebleminded were sterilized there would be no definite decrease in the total number in the next generation. This returns our thoughts once more to Penrose. Kolb continues with the statement that some people assert that if the procedure had been put into effect, some particular genius would not have been born. This argument is refuted by the argument that there would be no sense in breeding defectives in the hope that one of them might turn out to be a genius. A psychopath might turn out to be a genius, Kolb says, but a mental defective would not. These points are an engaging side issue to the main discussion, but they are, nevertheless, factors to be reckoned with in viewing the problem as a whole.

The remainder of Kolb's discussion serves well to turn our attention to the introductory remarks involving the public. Kolb states that the public is indifferent to and not in sympathy with the sterilization laws. Education is required, Kolb continues, in order to stress the importance of the problem with the assurance that no physiological harm as regards sexual urges can result.

Not everyone ventures to assert in a matter of fact tone that sterilization or other eugenic reform is the *sine qua non* of solving the mental disease and deficiency problem. Thus Parsons (10) writes that there are various opinions about how to deal with the problem of mental hygiene and mental disease and the true solution is yet to be forthcoming. An enthusiast might advocate eugenic reform but "on this proposal something might be said if one were wise enough".

One can become more specific and specialized in a problem such as this. For example, we find that Robie (11) is attracted to the psychiatric aspects. He says that "modern thought and scientific data" show the desirability of compulsory sterilization of feebleminded persons who are of a hereditary type. His discussion may be interrupted here for a moment to point out a difference of opinion. We found in preceding paragraphs that two writers, Sheldon and Ziegler (12), held more of a "patient as a person" approach in considering the measure as a relief from responsibility. This insertion is offered to indicate the vast scope which the discussion may attain. Robie goes on to say that mental disease as distinguished from feeblemindedness is another problem and that operations have been performed nearly twice as often on the insane as on the feebleminded. (He does not qualify the word "insane".) "All eugenists will agree that mental deficiency is much more often hereditary than is mental disease." Robie divides his discussion into organic and functional mental disorders. Included in the "organic" disorders are the senile dementias and the arteriosclerotic psychoses, which comprise twenty-two percent of the seventy thousand persons in State Hospitals in New York State (1940). This is an older age group and does not come under the question of sterilization. Six to seven percent of the persons in these hospitals are alcoholic psychotics, and unless feeblemindedness exists too, he disregards sterilization here. The .05 percent of psychoses with pellagra and the .7 percent of traumatic psychoses are also disregarded, and the 1.7 percent of organic brain diseases fall into the same class. In the ten percent of cases made up of general paretics the females should be sterilized, he says, because of the danger of infecting children newly born. The men may be sterilized and many might submit voluntarily when they are sufficiently well to leave the hospitals. The 0.1 percent comprising Huntington's chorea should be sterilized. Friedreich's ataxia, multiple sclerosis, progressive muscular dystrophy, muscular dystrophy, myotonia congenita, and hereditary optic atrophy comprise 1.5 percent of the State Hospital population. They are crippling to the individual and because of social and economic handicaps, sterilization is desirable. It should be pointed out here that a similarity may be noted to the view presented by Sheldon and Ziegler. Robie continues to write that forty-three percent of the State Hospital patients have been considered thus far and twelve percent of these should be subjected to sterilization. Three percent of the inmates are diagnosed as mentally deficient. These plus the twelve percent make fifteen percent in whom sterilization could be recommended.

In discussing functional mental disorders, Robie lists dementia præcox as twenty-seven percent, manic-depressive psychoses as fourteen percent, involutional

melancholia as three percent, and paranoia as one percent of the first admissions. The remaining patients are psychoneurotics, psychopathic personalities, or epileptic psychotics. There is a controversy about the hereditary aspects of functional psychoses. Robie says Barret found hereditary tainting in seventy-eight percent of 150 schizophrenics. Kraepelin found it in sixty-eight percent of 1,054 schizophrenics, but Myerson found it in sixty-seven percent of a nonpsychotic population. The number of persons studied here is not mentioned.

Since modern concepts of schizophrenia turn more to proper childhood training in an attempt to prevent the onset "it would be well to keep in mind the fact that even if it were possible to sterilize all cases of dementia præcox we would do very little toward stamping out the disease" (13). "... Sterilization of all hospitalized schizophrenics would not prevent more than three percent of those that would normally occur in the next generation". Robie says Kallman believes that the use of selective sterilization can be applied most favorably in the dementia præcox cases on a voluntary basis. This is to be questioned in view of Strecker and Ebaugh's claim that eighty-five percent of the schizophrenics have no insight into their condition. Robie asserts that if the repetitive incidence of schizophrenia in a family indicates a hereditary influence, sterilization should be compulsory in the individual case. Manic depressive psychosis shows more of a hereditary basis but in persons with a predisposition to the disease there are often indications of superior ability and many in these families make good citizens and useful members of society. Robie likewise advocates compulsory sterilization in families where manic depressive psychoses are shown to be definitely hereditary.

Psychoneurotics are rampant and often accomplish much good in an effort to overcome inferiorities. Sterilization in these cases is unnecessary and undesirable. Robie says epileptics tend to run in families and should be sterilized. Not often do they show excessive mental ability, but deterioration often does occur. He says many epileptics would themselves request sterilization if given the opportunity. Probably Robie would meet with contradictory opinions in the problem of epileptics. As for requests by the persons themselves, that might be due more to fear for their children without even considering evidence pro and con. It would be a matter of playing on the safe side.

It must be apparent to all concerned that there is room for injustice in the sterilization procedure. Myerson (14) says that sterilization of criminals, the insane, degenerates, and defectives is effective, but opinions vary concerning its proper use. The method can be abused and injustice result. The problem presents itself of whom to sterilize and when to sterilize. And then if we are to disregard the question of injustice and grant that the procedure was warranted in a particular case, we find that often the harm has been done before the operation was decided upon.

Myerson recommends the sterilization of the feebleminded who are discharged from an institution and are to return to their communities. He recommends the same procedure with the feebleminded persons in the community who "are socially inadequate or delinquent", especially if they are sexually immoral. It seems, however, that all this sounds entirely too simple. It certainly must be difficult in such situations to set up standards for the procedure. Myerson recommends a similar line of action for the insane of procreating age who are discharged from hospitals when having a remission of a chronic mental disease, such as dementia præcox, or who are recovering from a manic-depressive psychosis. This last point again makes room for argument if it is recalled that in a preceding paragraph a good claim was made for the manic-depressives. The fact is that each case should really be judged on its own merits. Admittedly they are all not alike. They differ qualitatively and quantitatively and what could be decided for one person probably could not be decided for another.

By now it must be apparent that there is a question of voluntary versus compulsory sterilization. Popenoe (15) is concerned about this. He writes that forbidding the issuing of marriage licenses to the registered feebleminded, institutionalizing these persons, and supplying them with contraceptive information are not effective in lowering their birth rate appreciably. Therefore, he says that sterilization is desirable, and he asserts that much can be done by voluntary sterilization. He declares that the problem will be solved largely by opening county or other tax supported hospitals to sterilization on a eugenic indication, just as they are to sterilization on a therapeutic indication. There should also be educational movements by social workers and others who come in contact with defectives. Sterilization would be voluntary. Compulsory sterilization "will care for" the severely defective, irresponsible, and uncooperating persons because many states permit it. There seems to be a flaw in this discussion, however, as regards voluntary or compulsory sterilization. If a person is uncooperative and does not volunteer for sterilization he should be sterilized by compulsion. The question seems to be one of compulsory sterilization only, in the opinion presented by Popenoe. If the "uncooperating" applies to the "severely defective", then there is less room for argument.

Myerson describes the operations for sterilization briefly in Rosenau's textbook. The vas deferens, or the fallopian tubes may be severed. Sterilization may also be accomplished by exposure to roentgen rays. Vasectomy consists of the ligation and excision of a small part of the vas deferens. The testicular end of the duct is left open to avoid cystic degeneration of the testicles and the distal end of the duct is tied. The operation takes a few minutes, is simple to perform, and does not require a general anesthetic. Sexual power or pleasure is not diminished. Salpingectomy is more complicated because the peritoneal cavity is exposed and the tubes are ligated near the uterus. They are severed beyond the ligature.

It is of interest to note that references to this subject of sterilization in the *Index Medicus* for the past eight years have been predominantly in the German literature. Aside from the purely scientific interest in this matter one would think that political interests have played an important rôle. Thus we see immediately the connection with Myerson's statement to the effect that there is room for injustice, although he might not have been thinking specifically of German demagogism. Even disregarding the madness of the Nazi political venture one is still confronted with this

element of gross error and injustice which must be avoided in such an important eugenic crusade.

Again reference is made to Myerson for the information that the law for sterilization in Germany was enacted July 14, 1933, and went into effect January 1, 1934. It is supposed to attempt to decrease the incidence of the "allegedly" hereditary unfit. There can be more than one interpretation of the word "allegedly". Myerson quotes Peter's translation of the important aspect of the law (16, 17). "Those hereditarily sick may be made unfruitful (sterilized) through surgical intervention when, following the experience of medical science, it may be expected with great probability that their offspring may suffer severe physical or mental inherited damages. The hereditary sick, in the sense of this law, is a person who suffers from one of the following diseases: inborn feeblemindedness, schizophrenia, circular insanity, hereditary epilepsy, hereditary Huntington's chorea, hereditary blindness, hereditary deafness, severe hereditary physical deformity. Further, those may be made unfruitful who suffer from severe alcoholism." Myerson says it has been estimated that about four hundred thousand people would soon be sterilized. (Note that the text was copyrighted in 1935.)

At the same time Myerson quotes Landman (18) as saying that the United States had twenty-seven states with legislation for human sterilization in effect and that up to 1932 approximately twelve thousand persons had been sterilized. Butler (19), in 1938, asserts that more than twelve thousand persons had ben sterilized in California alone. These persons were mentally defective and insane. He is concerned with the problem of marriage in his discussion, so he indicates that more than four hundred of these persons were married and at the time of writing were getting along well.

Sterilization operations were performed in the United States before any laws permitting them were enacted (20). In Kansas, sixty boys and girls in the State Home for the Feebleminded were sterilized by castration. This was discontinued because of the pressure of public opinion. In Indiana, Dr. Sharp, while a physician at the Penal Institution in Jeffersonville, did the first vasectomy on record. This was in the year 1899. The purpose of the procedure was to relieve one of the inmates who had been complaining of excessive masturbation and who had been insisting on castration. Later on Dr. Sharp used this operation for sterilization purposes and he operated on a few hundred males who volunteered. There was no specific legal authority for this but the success of the procedure was the impetus for the sterilization laws which followed here and abroad.

The United States was the first country in which a eugenic sterilization law was enacted (21). In 1897, a bill for sterilization was introduced into the Michigan legislature but it was not passed. In 1905, a law was passed by the legislature in Pennsylvania but the Governor vetoed it. The first eugenic sterilization statute was enacted in 1907 in Indiana. The law applied to "confirmed criminals, idiots, imbeciles, and rapists . . ." Later this was declared unconstitutional but was reenacted in 1927 in a modified form. In 1909, California, Connecticut, and Washington passed eugenic sterilization laws and since then similar laws have been enacted in many states. New York, New Jersey, and Nevada statutes were declared unconstitutional. Twenty-nine states had valid statutes by October 1940 (20).

The statutes in the various states are not uniform in type. "They vary in phraseology, in intent, in grounds for sterilization, in the type of operation to be performed, etc." (21). Usually the eugenic purpose is predominant but at times social and therapeutic purposes are recognized. Indications for sterilization are in order of frequency: feeblemindedness, insanity, epilepsy, idiocy, moral degeneracy, imbecility, habitual criminality, and sexual perversion. In fourteen states only vasectomy and salpingectomy are permitted, whereas in the other states there are no specifications. Three states permit castration but ten prohibit it. The other states do not mention it. All the states except Mississippi and Vermont have compulsory provisions but compulsion is rarely employed. Usually written consent of the nearest relative or guardian is obtained. An investigation by The Committee for the Investigation of Sterilization appointed by the American Neurological Association disclosed that compulsion is rarely used. If consent of a relative or guardian is not obtained, the laws are rarely enforced. Data compiled by the Human Betterment Foundation show that up to 1939, sterilizations performed for eugenic reasons numbered 30,690 in the United States. About forty percent of these were done in California, and it is interesting to note that the campaign of the Human Betterment Foundation stimulated great interest there. Between 1927 and 1938 the yearly average was between two and three thousand. This is a rather small number considering the number of institutionalized mentally unfit persons in this country, and it serves as an indication that wide acceptance has not been accorded eugenic sterilization in this country.

Number of Sterilizations in the U. S. in 1927-1938 (20)

Years	*Yearly Total*	*Cumulative Total*
1927		8,515
1928-29	2,362	10,877
1930-31	1,268	12,145
1932	3,921	16,066
1933-34	3,997	20,063
1935	3,103	23,166
1936	2,237	25,403
1937	2,466	27,869
1938	2,821	30,690

Figures on totals of sterilizations do not include voluntary sterilizations in states without statutes or sterilization for eugenic reasons done by private practitioners (20). There is evidence that these have increased recently.

In many sterilization statutes the term "insanity" is used and there is disagreement between the medical and legal implications of the word. The Committee of the American Neurological Association for the Investigation of Eugenical Sterilization recommends that, for the present, eugenic sterilization should be limited to: 1, Huntington's chorea; 2, hereditary optic atrophy; 3, familial cases of Friedreich's ataxia; 4, certain other disabling degenerative diseases recognized to be hereditary; 5, feeblemindedness of familial type; 6, dementia præcox; 7, manic-depressive psychoses; 8, epilepsy. Even in these cases a study should be made of the hereditary and environmental factors involved before coming to any decisions.

Statutes in American legislation apply mostly to patients committed legally to State institutions so that a group or class distinction results. This constitutes a criticism of the eugenic sterilization statutes in America. The suggestion has been made that the provisions of these laws extend also to patients in private institutions and to nonhospitalized persons who are affected with transmissible mental defects.

A comparatively small number of sterilization procedures are being performed each year so it seems evident that the statutes are not being enforced actively. In some states which have statutes, no official sterilizations were performed in 1939, and in only seven states that year did the total number exceed one hundred. There are over half a million feebleminded and mentally diseased persons in institutions in this country, so there must be "administrative laxity and inertia" as regards these sterilization laws (20). This article says that the reason may be that the procedure has not been widely accepted by the American people as "a sound and desirable practice". Public education and practical application are required if the procedure is to play an important rôle in the control of mental disease.

The possibility of obtaining good results is evidenced by the work of the Human Betterment Foundation in California. Probably few people would venture to deny the benefit to our citizens of this means of attempting to reduce the incidence of mental deficiency. In 1927, the United States Supreme Court upheld the validity of the sterilization law in Virginia (22). Justice Holmes said, "We have seen more than once that the public welfare may call upon the best citizens for their lives. It would be strange if it could not call upon those who already sap the strength of the state for these lesser sacrifices, often not felt to be such by those concerned, in order to prevent being swamped with incompetents. It is better for all the world, if instead of waiting to execute degenerate offspring for crime, or to let them starve for their imbecility, society can prevent those who are manifestly unfit from continuing their kind".

References

1. Dorcus, Roy M., and Schaffer, G. Wilson: *Textbook of Abnormal Psychology*, 1937.
2. Rosenau, M. J.: *Preventive Medicine and Hygiene.*
3. Strecker, Edward A., and Ebaugh, Franklin G.: *Practical Clinical Psychiatry*, 1940.
4. Penrose, Lionel S.: *Mental Defect*, 1934.
5. Noyes, Arthur P.: *Modern Clinical Psychiatry*, 1940.
6. Sadler, W. S.: *Theory and Practice of Psychiatry*, 1936.
7. Penrose: See ref. 4.
8. Sheldon and Ziegler: Marriage among mental defectives. *J.A.M.A.* (Nov. 26) 1938.
9. Kolb, Lawrence: *J.A.M.A.* (Nov. 26) 1938.
10. Parsons, Frederick W.: Public health aspects of mental hygiene. *New York State Jour. Med.*, Feb. 15, 1938.
11. Robie, T. R.: Eugenic sterilization from the psychiatric viewpoint *Human Fertility* 5:5 (Oct.) 1940.
12. Sheldon and Ziegler: See ref. 8.
13. Robie: See ref. 11.
14. Rosenau: See ref. 2
15. Popenoe, Paul: The reproduction of mental defectives. *Jour. Contraception* 4:4 (April) 1939.
16. Peter: *J.A.M.A.* 101:459, 1933.
17. Peter: *J.A.M.A.* 102:630, 1934.
18. Landman, J. H: *Human Sterilization.* New York, 1912.
19. Butler, Fred O.: *J.A.M.A.* (Nov. 26) 1938.
20. Eugenic sterilization in the United States. *Human Fertility* 5:5 (Oct) 1940.
21. Eugenic sterilization in the United States: a statistical summary. *Jour. Contraception* 4:7 (Aug.-Sept.) 1939.

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VALUE OF PAIN IN DIAGNOSIS

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Pain, in association with other symptoms, is useful in diagnosis, particularly of abdominal disease. Many but not all of the organs give rise to painful syndromes when they are subjected to pathological disturbances, but there are many abnormal conditions which cause no pain, so that the physician cannot always rely on pain as an indicator of abdominal disturbance; but there can be no argument regarding the statement that when pain is present it is a wonderful aid in diagnosis.

A phase of pain phenomena that has not been given deserved consideration is referred pain—particularly the hyperalgesic reactions of the skin found so frequently represented in the dermatogenic zones associated with abdominal organs.

At times this skin hypersensitiveness is useful in diagnosis and may be the determining factor in clarifying the confusing symptoms of an obscure lesion, for example, a diagnosis of appendicitis when the patient has had gallbladder disease. There is no doubt of its particular value in the diagnosis of abdominal disease, especially where the symptoms are of an undeterminate character and may be an expression of disturbances in one or more organs.

Hyperalgesia is best determined by running a pin point, under light pressure, over the surface of the body. As soon as a hyperalgesic area is reached, the patient responds by a slight jerk or local muscle twitching, and states that pain is felt. This point is then marked. Stroking with the point of a pin under light pressure from various places, toward the hypersensitive area as a center, marks with a pencil are made at the points where the hyperalgesia begins. These points are connected by a line made with a marking pencil. The boundary of the hyperalgesic zone is thus defined.

This sensitive reaction of the skin (hyperalgesia) may be inhibited by the application of cold (compresses, ice caps, etc.), and sometimes is increased by heat. In an examination, due allowance must be made for these factors. A prior inflammation may raise the threshold of the sensory receptive terminal filaments in the skin to such an extent that they do not respond to the usual inflammatory or other stimuli and as a consequence the hyperalgesia which, under the circumstances, should be present in the skin zones that are associated with abdominal or other diseased organs, is absent.

In addition to the foregoing modification of sensitive reactions to pain, we have:

1. *Referred pain,* in which pain is due to an irritation along the course of the nerve fibers, and the pain is felt as though produced in the somatic peripheral distribution area of the affected nerve or nerves.

2. *Projection pain,* a term given to pain felt in a part which has no sensation, as in locomotor ataxia, or in a part which, because of amputation, no longer exists.

3. *Reflected pain,* which is carried from the affected organ either to the sympathetic ganglia or is transferred in the cord into the somatic nervous system and is felt in the peripheral distribution of these nerves.

4. *Transferred pain.*—In this variety of pain the stimulus is carried to the same or to a higher or a lower level of the cord through associated nerve tracts. This type of pain may be experienced in pneumonia, pain in the abdomen; appendix, pain in the thorax; ovarian disease, pain in the back; pleurisy, pain in the abdominal wall, usually on the same side.

In transferred pain it is likely that the sensorium may mistake the origin of the peripheral distribution of pain, such as occurs in degeneration of the posterior roots (tabes) or the spinal ganglia and sensory tracts of the spinal cord or lesions of the cornu of the cord. It is probable that in these conditions the sensory impulses, which originate in these structures and are carried by the sensory fibers, are not entirely obtunded by the pathological processes which have taken place, so that touch may, in some instances, be conveyed to a minor but normal degree when pin prick or pinching is very painful. Under the circumstances, localizing sensations which inform the sensorium of the position of a limb may be present only in a restricted degree. In such a state, an impulse propagated through the sensory pathways is very weak and in its perception by the brain (there being little or no localizing stimuli accompanying it) may be recognized as coming from the opposite side where localizing neurons are intact.

Attributes of Pain

Pain also has certain attributes which are useful in diagnosis, namely:

1. *Character.*—A description of the pain, as expressed by the patient, is frequently useful in designating the type of pain. The more fertile the imagination of the patient, the more lurid is the characterization. Pain is usually likened to some sensory impression which has been experienced in the past; as burning, gnawing, pinching, smarting, boring, shooting, stabbing, tearing, etc.

In early times, with the tendency to scholastic and metaphysical elaboration, many classifications of pain, depending on the description of the patient, were made. Halmenan distinguished seventy-five varieties of pain; Avicenna, in the tenth century A.D., described fifteen varieties.

2. *Persistency.*—Pain is divided according to persistency into constant, intermittent, and remittent. Constant pain is due to constantly acting factors, as pressure by new growths, static disabilities. Pain may be intermittent and even remittent, as in inflammation of organs which have a recurring functional activity; for instance, the ovary, uterus, or fallopian tubes. Attacks of great severity are given the name *crises.*

3. *Time of pain—diurnal or nocturnal.*—Diurnal pain is made worse by all conditions concerned with daily activity (mental or physical). These activities may be concerned with (a) the locomotor apparatus: muscle (psoas in appendicitis), gluteal, bones, joints; position, lack of motion, and change of position; (b) eye strain; (c) neurasthenia; (d) physiological acts: eating, digestion, defecation, breathing, etc.

Nocturnal pain, as a rule, is worse than is diurnal pain and is more common in syphilitics, in uremia, gout, and tuberculous disease of the hip. It is also common in colics, in which there is a relationship between smooth and striped muscle fibers, so that when one is active the other is idle.

When pain is present at a particular time, one should always inquire concerning the patient's habits, his routine of work, his eating (this especially so if his pain seems to be associated with the ingestion of food).

4. *Sensitiveness to pain.*—This is less in early infancy. The infant at the time of its birth, I have no doubt, is able to receive the impressions which later it interprets as painful; but it requires time to coordinate sensory impressions so that they may be classified as beneficial or harmful. At this early period, pain as a sensory perception has not yet entered into consciousness. It may be stated that the infant has an instinctive dread of all sensations which betoken an act or condition detrimental to its welfare. This protective and defensive instinct is an inherent and latent consciousness which awakens under the stimulus of external life and takes upon itself the defense of the organism through the perception of all pernicious impulses as disagreeable sensations (principally as pain) from which it is wise to be disassociated. This sensitiveness to all painful impression develops to a maximum in adult life and again gradually becomes less as age advances.

5. *Individual susceptibility.*—Those of fair and delicate skin among individuals of an impressionable and imaginative race, are more susceptible to pain than are those of darker and thicker skin. Lessened susceptibility is present in some persons because of some inherent characteristic as mental habitude, intellectual dullness, stoicism, etc. (A French surgeon who was performing an operation noted the patient's statement as follows: "The pain is nothing, but the noise of the saw sets my teeth on edge.")

Women are less susceptible to pain than are men.

6. *Tissue susceptibility.*—Tissues having the greatest blood supply are most sensitive. Nerves for pain are also carried by the vasomotor system. There is a lack of pain sensation in the nails, hair, etc. Bone cortex is insensitive but the periosteum and endosteum are very sensitive. Viscera are insensitive to ordinary stimuli but the hollow viscera respond to overstretching by the sensation of pain.

7. *Local temperature changes* produce variations in pain susceptibility. The localized application of heat and cold have an action on the blood supply. Heat dilates the blood vessels and causes a localized increased supply of blood with increased sensitiveness of the superficial area. Cold has the opposite effect. The application of heat increases the pain in acute inflammatory conditions, but relieves the pain when it is due to a localized accumulation of toxins in the part.

8. *Intensity of pain.*—This depends, among other factors, upon (a) character of the stimulus, its inten-

sity, rapidity, extent, and duration; (b) sensitiveness of the patient; (c) irritability of the nerves (the trigeminus, sciatic and splanchnic nerves, as compared with others, are more irritable); (d) extent and number of sensory nerve fibers involved.

The intensity of the pain may be estimated by:

(a) Blood pressure elevation, which occurs in tabetic crises and in uterine contraction pains in labor.

(b) Motor reflexes, protective in character as expressed by withdrawal from injury; contraction of muscles which is present in the abdominal muscles in peritonitis, and in visceral inflammatory lesions; contraction of muscles surrounding a joint; contraction of muscles of the neck, producing rigidity of head in meningitis, etc. Vomiting may represent a motor protective reflex in an intraabdominal disease.

(c) Complaints of the patient by which evaluation of the pain may be obtained. The accuracy of such complaints may be judged by a comparison of sensations in the affected part with those of other portions of the body.

(d) Reflex vasomotor signs, as pallor and syncope.

(e) Dilatation of the pupil (not available after use of drugs, morphine, etc.); amount of narcotic necessary to overcome the pain (colics require more morphine than any other pain); appearance of the patient (great pain causes immobility of the patient, except in intestinal colic; rigid chest position is found in pleurisy or intercostal neuralgia).

(f) The patient's description of his pain is not of especial value; it depends upon his descriptive ability, powers of imagination and vocabulary. A factor of importance in the evaluation of the intensity of the pain is the persistence with which the attention of the patient is devoted to the pain to the exclusion of everything else. Should he be consistent and persistent in his statements of its character and intensity, and should his attention not be easily drawn away or occupied with other matters to the exclusion of pain, it may be concluded that a pain of considerable intensity is present.

9. Mechanical factors.

Conditions Associated with Severe Pain

1. *Collapse,* which is associated with cold sweats, weak or rapid pulse, and syncope.

2. *Loss of weight.*—Emaciation is not due to pain itself, but to derangement of physiological functions causing loss of sleep, etc. It is also due to associated worry and mental anxiety which are conducive to the wearing out of the patient.

3. *Reactions in the respiratory system.*—(a) Increased respiratory movements in pain crises. (b) Decreased and shallower respiratory movement in thoracic wall disease (abdominal in type). In pleurisy the respiration is shallower and usually more rapid. (c) In abdominal disease it is thoracic in type and is more rapid.

4. *Circulation.*—Increase of pulse rate, loss of equilibrium due to cerebral anemia, trophic changes in the tissues, protective functional disturbances, and elevation of temperature.

Diagnostic Value of Pain

With the multitude of facts involved in the evaluation of pain in diagnosis, the doctor is apt to become confused and voice his difficulty by asking, what does it all mean; what is the value of pain to us as practicing physicians? The answer is that pain frequently determines the location of the lesion very quickly—appendicitis, meningitis, gallbladder disease, kidney disease, etc. and the type of lesion. Intraabdominal colics are relieved by pressure on the abdominal wall. In visceral inflammation, the pain is increased by pressure on the abdominal wall. In labor the pain is intermittent, it quickly reaches a crescendo and then there is a period of relief. Progress of the lesion and the effect of therapy may be evaluated by variations in pain intensity.

Pain which is present in intraabdominal disease indicates that there is, 1, sensitiveness to pain in intraabdominal viscera, 2, parietal peritoneal irritation; 3, mesenteric pull; 4, ligamentary pull—liver, spleen, etc.; 5, pull or traction by adhesions, where the pain is generally localized at one point which is also sensitive to pressure. It is increased by change of position and by peristalsis; increased on eating when adhesions are between the stomach and the anterior abdominal wall. Hyperextension of the body also produces pain when such extension causes stretching or dragging upon the viscera. We should remember that the greater the extent of adhesive formation the less is the pain.

Intestinal adhesions which are not connected with the abdominal wall nor the mesentery and not causing kinking or obstruction of the bowel, as a rule cause no pain. Omental adhesions to the abdominal wall frequently cause pain because of the traction on the parietal peritoneum.

Intravisceral tension will cause pain, according to Meltzer's law of contrary innervation, and demonstrated by Hertz in gastric ulcer in which the pain is a contraction pain, as shown recently by Alvarez.

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REST AND PAIN—AN INTRODUCTION

JOHN N. E. BROWN
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On picking up a copy of Hilton's *Rest and Pain,* 1907 edition, one's attention is at once attracted by an illustration on the outside of the front cover. It is a picture of the stricken Philoctetes who had charge of one of the squadrons of Greek fighting ships in the Trojan War. While the ships were at Aulis, it is written that Philoctetes was bitten by a serpent.

He is shown in the illustration in a sitting posture, the wounded limb flexed and bandaged. The patient is braced by his left arm and hand, while his right holds the wing of a large bird with which he fans the inflamed and painful area to lessen the discomfort and pain. Phimacus was ordered to look after him.

The appropriateness of the illustration to Hilton's subject, *Rest and Pain,* is apparent. Then we turn to Jacobson's preface and learn that the original of the picture is the work of Boethius. We seek at once to learn something more about Philoctetes and Boethius.

The great struggle between the Greeks and the Trojans had proceeded for ten years without this renowned fighter, Philoctetes; and was going badly for the Greeks. Their leader consulted the oracle and it was divulged that success could not be achieved without the arrows of Hercules, which Hercules had obtained after he had slain the seven-headed Hydra. Philoctetes had decided to return home, but en route to Melibœa, the Manes of Hercules appeared and directed him to return to the fight, which he did and by his efforts the Trojans finally were defeated.

As to Boethius or Boetius), he was born in Rome about 480 and executed at Pavia in 524. He was an outstanding philosopher and statesman, and a friend of Theodoric the Great. He has been referred to as the last of the Roman philosophers or the first of the Scholastics. He was deeply imbued with Pagan philosophy, although he was probably an orthodox Christian which may have accounted for his imprisonment and execution. I can find no reference to his ability as an artist or sculptor. While in prison he wrote his great work on the *Consolation of Philosophy*.

Hilton's advice in his first chapter is well worth reading carefully by both patient and doctor. *Rest and Pain* is decidedly religious in tone, indicating much sincerity, and modesty. Hilton maintains that the attainment of even mediocrity is best secured by planting a high standard before the mind, with the determination of approaching as near to it as one has strength to do. Confirming this idea, he quotes Horace's *Aid to Poetry,* commencing at line 348. Here is the translation: "The string does not invariably give the note intended by the mind and hand; we listen for a flat, and often get a sharp; nor does the arrow always hit the target."

Hilton almost apologized for using the subject, "Rest and Pain". "Rest, physiological as well as mechanical, so important as to demand the very serious attention of every practical surgeon. When God ordained that man should live by the 'sweat of his face', as a punishment for his disobedience, it pleased him in the plenitude of his unspeakable benevolence, to permit man's fatigue and temporary exhaustion, to be followed by the greatest earthly solace—the blessing of rest and repose, by calm and peaceful sleep, an immediate reward of labor."

Neurosis in Flying Personnel

"Flying Stress" is a term used in discussing neuroses in flying personnel. Understanding of the term and all that it represents is more than ever important today. A study made by C. P. Symonds (*Brit. Med. Jour.*, Dec. 4 and 11, 1943) gives valuable information on the advances made in England in forestalling danger by recognizing the temperamentally unfit, in taking care of aviators who break down, and in readjusting valuable personnel.

In this war the progress made in controlling physical factors, such as anoxia, and the wider understanding of the neuroses place the investigator in a much more favorable position. It is Symond's belief that the symptom pattern or reaction type of neurosis encountered cannot be related to any single cause. An anxiety state, for instance, may be caused by emotional conflict, infection, or exhaustion. Individual constitution is the all important bulwark between environmental stress and symptom pattern.

From an analysis of all data obtainable about the men who break down, Symonds has reached the conclusion that three contributing factors are at work. These are "flying stress", "nonflying stress", and "predisposition". Each of these can be graded for severity, as nil, slight, moderate, severe, or exceptional, on the basis of the patient's story, his history, and the background obtained from his officers. Questioning a sergeant who had developed headaches and insomnia supposedly from the noise of the engine brought out that his father had had an obsessional neurosis, while the boy himself had shown neurotic tendencies in childhood. Flying stress and nonflying stress were accordingly indicated as nil, by standards of what the ordinary man could take. Predisposition, however, was indicated as severe. Another patient revealed domestic worries, accentuated by his weakened condition following an operation. In his case flying stress and predisposition were considered nil; nonflying stress was the cause. A third man, having distinguished himself in action and physically fit to fly again, remained tense, anxious, depressed and self reproachful. Flying stress in his case was rated as severe, predisposition moderate, and nonflying stress nil.

Analysis of all these data indicates that the incidence of neurosis in different tactical duties varies directly with the amount of hazard encountered. Symonds says: "It is thus lowest in Training Command, highest in night bombers. In duties which involve long trips with relatively little hazard the incidence of neurosis is low, suggesting that emotional tension is a more important factor than physical or skill fatigue. That skill fatigue is probably an operative factor is shown by a rather higher incidence in pilots than in all other members of the crew taken together. Causal factors of a physical kind were recorded in less than a third of the cases, but psychological factors were present in ninety-nine percent of the cases."

Other observations of interest in Symond's investigation show that the more flying and operational experience the man has had before breaking down, the less likelihood of predisposition entering into the picture. Nonflying stress played a part in thirty-six percent of the cases. Experience with affected flyers make predisposition easy to assess. Exposure to danger proved the most important element of flying stress as a cause of neurosis in flyers. Fear in the face of danger has a psychological value within certain limits, and may serve as a definite momentary stimulus. Anticipation of danger and fuller realization of it after it is passed play varying parts, according to the individual's personality. Symonds analyzes carefully the components of fear and the definite effort required by courage. The emotional tension resulting from the prolonged exercise of courage is a most important element of stress. Skill fatigue as well as physical fatigue are further contributors to flying stress.

The prime requisite for a flyer is confidence. Symonds presents a scholarly analysis of the foundations of confidence, its component parts of primary fearlessness as differentiated from courage, of inhibition as a basis of fearlessness, the part played by courage or persistence in a task in spite of fear and thus attended by emotional conflict, and the highly individual ways in which each person must understand his loss of confidence and be shown how to regain it.

Editorials

Incidence of Cancer

There are certain groups that are quite perturbed about the apparent increased incidence of cancer. It seems that in the last few years the number of cases of cancer has been slowly on the up grade. The fear is voiced that due to a relative shortage of medical men this increase will be even more marked, and a plea has been made to educate laymen so that they may be on a sharper lookout for early symptoms of cancer, and, in turn, call for a medical examination when, under ordinary conditions, perhaps they would neglect going to a physician and so miss the opportunity of early diagnosis and treatment.

At first glance, this seems like a logical procedure but the practice may have its drawbacks. It requires little imagination to visualize persons examining themselves every fortnight with a view of finding a carcinomatous growth. Our fear is that practices of this kind may lead to a more rapid development of large groups of hypochondriacs and psychoneurotics, and in many instances these patients are as difficult to cure as are cases of carcinoma in a well advanced stage. We do not say that an answer is being formulated by us which is negative to the proposed self-examination idea, but we do believe that this whole problem should receive more careful consideration before we conduct propaganda of cancer-hunting through the newspapers, radio, and bill boards or even in a well printed brochure. Cancer is a more important problem today than it ever has been and will become a more vital problem with each passing decade.

Our position is that as the span of life is lengthened the proportion of deaths from cancer will increase for, as we know, the incidence of cancer increases after middle age. Progress has been made in the treatment and cure of cancer, especially if early treatment, surgical or otherwise, is instituted. Nevertheless, we are not certain that modern science has kept pace with what we believe to be an ever-increasing incidence of cancer due to the years that have been added to man's existence through many agencies of scientific investigation.

Breakdown

History reveals that wars in the past have always brought about a certain breakdown in the accepted standards of behavior of the civilian population. We view with considerable alarm a new standard of behavior which is prevalent in this country due to various conditions brought about by our war economy. Black markets are prevalent. Rationing, which is a necessity, has brought a string of evils in its train. We also have inadequate housing conditions, and many mothers are working in war industry without proper and adequate provision being made for the care of their children. There are also many women, unable to carry on a constructive family existence because their menfolk are overseas, play rather fast and loose, feeling that they should live in the present, not being certain of what the future holds. We also see money being spent in a desperate effort to squeeze artificial joy out of the passing moment. This money, in the main, is that which has come to those who have not been accustomed to a surplus and who give little thought for the morrow.

But most lamentable to us is the final effect on many youngsters. They think it is smart to secure gasoline in devious ways for pleasure driving. Their elders too frequently state how smart it is to secure this or that commodity by knowing the right people or through some more or less dubious channel. We feel that all this leads to a breakdown of fundamental values and a lack of respect for the acquiring of the necessities of life through straightforward constructive channels. The effects that we observe on all sides are similar to those that were caused by the highly immoral laws on prohibition we had sometime ago. Anything goes if you can get away with it; bribery in various forms, either through premiums on ration points or in the purchase of Pullman car tickets. This situation is a far cry from the days of getting what one has paid for and giving what one was paid for.

If we felt that this was a transitory situation, we would not be so apprehensive, but we fear that it may create behavior patterns which will lead to a moral breakdown that will leave its stigma for many years to come. We wonder if the result of all this will not be quite opposite to what most of us believe we are fighting for.

Shock After Injury

Shock has been defined as a state of profound mental and physical depression consequent upon severe physical injury or an emotional disturbance. This, however, is scarcely an accurate definition as it does not cover all types of shock. The question was fully discussed at a meeting held by the Royal Society of Medicine not long ago. Dr. J. C. McMichael indicated certain definite groups of shock: the posttraumatic hypertension; neurogenic shock, occurring because the vagus seemed to be playing an important part in keeping the pulse slow; circulatory collapse, due to mechanical causes, such as fat embolism, which might occur after injury; and toxemic shock, due presumably to the flooding of the system with bacterial toxins. It is obvious that the blood pressure must be maintained to insure a good coronary flow, as this depends upon the blood pressure,

and when it falls too low the heart stops. Blood pressure must also be maintained to insure an adequate blood supply to the brain, for if the respiratory center is deprived of blood, respiration stops.

The best means for raising the blood pressure after extensive hemorrhage is by transfusion. This measure should not be delayed, and if suitable blood is not available, a substitute should be used. The transfusion should be continued on the operating table, and must be going on as a drip after an adequate restoration of the blood pressure had been achieved.

As pointed out by Dr. Geoffrey Marshall, medical literature in the last war described the clinical effects of shock, which were later confirmed by Cannon, Bayliss, Dale, and Laidlaw. They showed how shock could be differentiated from the effects of hemorrhage in a considerable number of cases of wounding and described the way in which treatment should be varied in each case.

Dr. McMichael deprecated overheating in treating these cases and he and some other speakers were adverse to giving morphine as a routine measure. Mr. G. G. Slesinger expressed disagreement with this opinion, pointing out that by the time the men who had been wounded in the field were transferred to a casualty clearing station, they were almost always in considerable pain and required morphine. He advocated the intravenous use of morphine. He stressed the point that in the casualty operating theater the maxim should be rapid operation; two-hour operations on patients wounded in air raid casualties, he said, were equivalent to a death warrant. He expressed horror that that monstrous misconception of the last war, the guillotine amputation, had reared its head in the Libyan campaign.

Mr. Slesinger's strictures on the belittlement of heat and of the value of morphine in the treatment of injuries may appeal to some surgeons and opinion is probably divided on these two points. However, recent work in this country tends to confirm Mr. Slesinger's opinions, but there can be no doubt that there is an urgent need for as rapid operations as is possible in the conditions which exist today in various parts of the world.

Spring Plants in Medicine

Many spring plants are used as medicinal remedies in folk-medicine as well as in scientific medicine. Violets, either pure or made up into syrups, cordials and conserves, have been used for centuries in all sorts of ailments. A tea made from the dried leaves is used for coughs after colds, bronchitis and whooping cough. Pastilles or lozenges made from violets and sugar became popular after being praised by King Charles II of England. They were used for heart trouble, sore throat, headache and insomnia. Today, violet extracts are used in exact doses for coughs.

The bright yellow flower of the dandelion is an early sign of spring, and the medicinal qualities of the root of this plant are contained in Taraxacum officinale. Dandelion salad is also highly appreciated in France and there are many recipes for dandelion beer and wine. In folk-medicine, the success of dandelion cures for chronic eczema might be explained by the laxative effect of taraxacum. Extractum taraxaci is prepared from the root and dried herb; it contains choline, and is used to stimulate the action of the kidneys and the secretion of bile by the liver.

The poetic lily-of-the-valley is used sometimes for a rather prosaic purpose; its dried and powdered blossoms are an ingredient of a certain kind of snuff which is supposed to free the head of dullness and headache. All parts of the plant are used in medicine. It contains substances of a digitalis character. Convallaria, the dried leaves and roots of the plant, is a diuretic heart stimulant, and was employed as a remedy for hydrops long before the virtues of digitalis were recognized by the medical profession. Culpeper's *Herbal* (1653) calls the wine of the flower more precious than gold for the prevention of apoplexy. The plant, lovely as it is, may cause poisoning because of its digitalis-like content.

A tea made from the blossoms of the cowslip is used in folk-medicine for kidney and bladder trouble, gout, migraine and colds. In former times a bath made from boiled leaves of the anemone, this tender flower of spring, was supposed to be a cure for leprosy, and the roots have been recommended for rheumatism and sore eyes.

Teas made from mixtures of many wild flowers are used for "purifying" the blood by stimulating the bowels and kidneys. One of these herb tea mixtures contains the following ingredients: fennel roots, parsley and borage roots, pennyroyal and violet roots, succory and endive roots, hollyhock leaves, mallow and red garden mint leaves, liquorice root, aniseed, fennel and cummin seed and dandelion root.

Early in the spring the sap is drawn from the birch, a beautiful tree in spring. This sap and a tea made from the leaves of the tree are used as a diuretic in hydrops and rheumatism. Methyl salicylate has been found in birch bark. Birch water is supposed to be helpful for loss of hair; birch tar, made by dry distillation of the wood, is used for the treatment of skin diseases, and the Russians believe birch wine or sap is a cure for consumption.

The growing of medicinal plants is being attempted in many countries where foreign imports are restricted to some extent. We are returning to the customs of the early settlers who gathered the weeds of the fields and forests for "greens" and for "simples", and found valuable herbal household remedies among them. With each new spring the abundant treasures of an ever-kind nature are brought to our attention.

News Items

Henry W. Frauenthal Memorial Meeting.—At a meeting of the Clinical Society of the Hospital for Joint Diseases, held on Tuesday evening, March 14th, the program consisted of a Henry W. Frauenthal Memorial. Dr. J. Lebenstein delivered the principal address.

Symposium on Geriatrics.—At a joint meeting of the Southeast and South Branches of the Philadelphia County Medical Society the program consisted of a symposium on geriatrics. Dr. Maurice Muschat presented a paper on "Genitourinary Aspect"; Dr. Charles Rupp, Jr. on "Neurological Aspect", and H. L. Goldburgh, on "Medical Aspect". Dr. E. J. G. Beardsley was the commentator.

Scientific Research at Ohio State University.—The Research Foundation of the Ohio State University recently made grants amounting to $35,600 to the University to stimulate and foster research in the basic sciences, according to *Science*. These grants are $10,000 for Research Foundation fellowships in the Graduate School; $10,000 for research on nuclear x ray sources; $5,000 for research in applied mathematics; $5,000 for research in electronics; $5,000 for surgical and medical research; and $600 for a technical assistant in zoology and entomology.

Increase in Prescriptions.—Dr. E. L. Newcomb, executive vice-president of the National Wholesale Druggists' Association, says that although there is an acute shortage of physicians in civilian practice, the prescriptions filled by the nation's druggists reached a new high in 1943. The volume of drug prescriptions, which normally totals about two million a year, was more than 230,000,000 in 1943.

Harrison Martland Lecture.—Dr. Otto Loewi, research professor of pharmacology, New York University College of Medicine, delivered the ninth annual Harrison S. Martland Lecture, on March 22d, at the Academy of Medicine of Northern New Jersey, Newark. This annual lecture is given in honor of Dr. Martland by the Essex County Anatomical and Pathological Society.

Pharmacy and Public Health.—At a meeting of the New York Branch of the American Pharmaceutical Association, held on April 10th, under the auspices of the Fordham University College of Pharmacy, the evening was devoted to a discussion of pharmacy in relation to public health. Dr. Leonard J. Piccoli, professor of public health at the University, was chairman. The various aspects of the subject were presented by Mary Grace, Ph.G., Dr. C. R. Addinall, Dr. Walter Clarke, and Dr. Ivor Griffith. A general discussion followed.

Ohio State Medical Association.—The ninety-eighth annual meeting of the Ohio State Medical Association will be held in Columbus, on May 2d, 3d, and 4th, under the presidency of Dr. C. C. Sherburne, of Columbus. Six guest speakers will participate in this meeting. They are: Dr. Andrew C. Ivy, of Chicago; Dr. Arthur W. Allen, of Boston; Dr. Anton J. Carlson, of Chicago; Dr. Edward L. Turner, of Nashville, Dr. Mervin H. Knisely, of Chicago, and Dr. Paul H. Holinger of Chicago.

New England Society of Physical Medicine.—A meeting of this society was held in Boston on Wednesday evening, March 22d. Dr. David C. Ditmore professor of proctology, Boston University School of Medicine, read a paper on "Anal Fissure", and Dr. Charles W. McClure, gastroenterologist and gastroscopist, Boston City Hospital, presented sigmoidoscopic slides demonstrating bowel tumors. Dr. Arthur L. Watkins is president and Dr. William D. McFee is secretary of the society.

Coronary Insufficiency.—At a meeting of the New York Cardiological Society, Inc., held at the New York Academy of Medicine on Friday evening, March 24th, the question of coronary insufficiency was discussed. Dr. Joseph E. F. Riseman, of Boston, read a paper on "Angina Pectoris" which was illustrated by motion picture in color, with sound effects. Among those who participated in the discussion were Dr. Cary Eggleston; Dr. Paul A. Kennedy, Dr. Milton J. Raisbeck, Dr. Harry Gold, Dr. R. Burton Opitz, Dr. Arthur L. Washburn, and Dr. B. S. Oppenheimer.

International Spanish Speaking Association of Physicians.—A meeting of Chapter Magnum of the International and Spanish Speaking Association of Physicians was held in New York, on Friday evening, March 24th, with the Consul General of Paraguay as the guest of honor. A symposium on recent discoveries in medicine was presented as follows: Penicillin treatment, by Dr. C. Church; sulfonamide treatment, by Dr. D. J. Impasato; endocrine treatment, by Dr. L. Berman; vitamin treatment, by Dr. L. A. Rosenbloom, and syphilis five day treatment, by Dr. N. Sobel. Eleven new members were elected and a resolution in memory of the late Dr. C. L. Glaessner was read. Dr. J. M. Gershberg is president, and Dr. J. J. McDonald is secretary of the association.

Internships in Public Health.—Applications from young physicians interested in securing training in the field of public health will be considered by the New York State Department of Health, according to *Health News*. Applicants must possess certain basic qualifications, among which are United States citizenship, graduation from a medical school approved by the American Medical Association, and licensed to practice medicine in New York State or eligible to take the examination to obtain such a license. The training consists of six to twelve months' field experience followed by an academic year at a postgraduate school of public health. For further particulars, write to the State Department of Health, Albany 1, New York.

The Passano Foundation.—The Williams and Wilkins Company of Baltimore has established the Passano Foundation "for scientific and educational purposes, particularly to provide for scientific research and to publish the results of scientific research and to make awards for meritorious achievements in scientific research", according to *Science*. By the terms of the charter the board of directors may inaugurate the establishment of "an annual award not to exceed $5,000 for an outstanding contribution by an American citizen to the advancement of medical science made within the year". The directors include Dr. Emil Novak, associate in gynecology at the Johns Hopkins University Medical School, and Dr. George Corner, director of the Embryological Laboratory of the Carnegie Institution of Washington.

Personal.—Dr. Willard C. Rappleye, dean of Columbia University College of Physicians and Surgeons, has been elected chairman of the Research Council of the Department of Health, New York City.

Lieutenant Colonel William C. Menninger has been appointed chief of the Neuropsychiatric Branch in the Office of the Surgeon General of the U. S. Army, to fill the vacancy caused by the death of Colonel Roy D. Halloran. Dr. Menninger was formerly neuropsychiatric consultant for the Fourth Service Command at Atlanta, Ga.

Dr. Fred Wharton Rankin, Brigadier General, Medical Corps, A.U.S., delivered a lecture on "The Most Recent Methods in the Treatment of War Wounds and Surgical Shock" at the New York Academy of Medicine on Friday afternoon, April 14th.

Dr. Courtney M. Smith, Senior Surgeon (Reserve), U. S. Public Health Service, formerly Regional Medical Officer of the Ninth Civilian Defense Region (West Coast), has been appointed Assistant Chief Medical Officer of the U. S. Office of Civilian Defense.

Dr. Michael Levine, biologist in charge of the Cancer Research Laboratory of Montefiore Hospital, New York, has been appointed assistant director.

Dr. Wilbur Emory Burnett, professor of clinical surgery, Temple University School of Medicine, Philadelphia, has been appointed professor of surgery to succeed Dr. William Wayne Babcock who resigned recently and has been made professor emeritus.

Dr. Hobart A. Reimann, professor of medicine at Jefferson Medical College, Philadelphia, recently visited Puerto Rico as the guest of the Puerto Rican Medical Association in San Juan, where he gave several lectures on acute infectious diseases.

Dr. George W. Smeltz, of Pittsburgh, has been named president-elect of the Pennsylvania Psychiatric Society.

Dr. John G. Kidd, formerly associate member of the Rockefeller Institute for Medical Research, has been appointed professor of pathology at Cornell University Medical College, and also serves as pathologist at the New York Hospital.

Dr. Walter B. Cannon, professor emeritus of physiology, Harvard Medical School, Boston, has been appointed visiting professor of physiology at the New York University College of Medicine.

Dr. Oswald S. Lowsley, of New York, recently made a tour of inspection of United States Naval Hospitals, in his capacity as honorary consultant to the United States Navy. He visited fourteen naval hospitals in the Middle West, the Pacific Coast and the Gulf of Mexico.

Dr. Colin M. MacLeod, professor of bacteriology, New York University College of Medicine, delivered a lecture on "The Past, Present and Future of Chemotherapy" at the New York Academy of Medicine on March 23d. This was one of the series of Lectures to the Laity being given at the Academy.

Captain Sheldon C. Sommers, formerly of Indianapolis, has been awarded the Silver Star for heroism in action in Italy.

Captain Richard F. Kuhn, formerly of Detroit, has been awarded the Medal of Distinction by the Bey of Tunis in recognition of the medical aid he gave to Tunisian civilians while serving as a flight surgeon for the Red Devil Flying Fortress Squadron.

Captain Joseph E. Schenthal, formerly of Baltimore, has been awarded the Legion of Merit by order of Lieutenant General George H. Brett, commander of the Caribbean defense area, in recognition of his work in combating malaria.

Rear Admiral Ross T. McIntire, Surgeon General of the Navy, was recently promoted to the rank of Vice Admiral.

Dr. Charles-Edward A. Winslow, professor of public health at Yale University School of Medicine, has been appointed editor of the *American Journal of Public Health*, succeeding Dr. Harry S. Mustard.

Dr. Hattie Alexander, associate professor of pediatrics at Columbia University, is the recipient of the $500 prize given annually under the auspices of the American Academy of Pediatrics by Mead Johnson and Company for "outstanding scientific contributions to pediatrics in the United States."

Dr. Harold C. Wiggers has been appointed associate professor of physiology at the College of Medicine of the University of Illinois, Chicago. He was formerly assistant professor of physiology at the Western Reserve University School of Medicine, Cleveland.

California Medical Association.—The seventy-third annual meeting of the California Medical Association will be held in Los Angeles, Sunday and Monday, May 7th and 8th, with headquarters in the Hotel Biltmore. Officers of this society are: Dr. Karl L. Schaupp, president; Dr. Lowell S. Goin, president-elect; Dr. E. Vincent Askey, speaker; Dr. Philip K. Gilman, council chairman; Dr. George H. Kress, secretary-treasurer and editor, and Mr. John Hunton, executive secretary.

New York State Medical Society.—The annual meeting of the Medical Society of the State of New York will be held in New York City, May 8th to 11th, with headquarters at the Hotel Pennsylvania. The officers of the society are: Dr. Thomas A. McGoldrick, of Brooklyn, president; Dr. Herbert H. Bauckus, of Buffalo, president-elect; Dr. Norman S. Moor, of Ithaca, second vice-president; Dr. Peter Irving, of New York, secretary and general manager; Dr. Edward C. Podvin, Bronx, assistant secretary; Dr. Kirby Dwight, of New York, treasurer; Dr. James R. Reuling, Jr., of Bayside, assistant treasurer; Dr. Louis H. Bauer, of Hempstead, speaker, and Dr. William Hale, of Utica, vice-speaker.

Missouri State Medical Association.—The eighty-seventh annual meeting of the Missouri State Medical Association will be held in Kansas City, April 23rd, 24th, and 25th. A patriotic program will be presented and the meeting will be inaugurated by presenting the roster of the physicians in military service from the Jackson County Medical Society. Guest speakers include Colonel John T. King, Medical Corps, Chief of Medical Service, Army Medical Center, Washington, D. C., and Dr. Henry K. Ransom, associate professor of surgery, University of Michigan. Colonel King will conduct a symposium with the aid of Missouri physicians on "The Heart and Hypertension" and Dr. Ransom will speak on "Abdominal Incisions". Dr. Curtis H. Lohr, of St. Louis, a Lieutenant Colonel in the Medical Corps is president-elect, and as he is now serving in the armed forces, he will be installed *in absentia*. Dr. A. W. McAlester, Jr., of Kansas City is the retiring president.

Iowa State Medical Society.—The ninety-third annual meeting of the Iowa State Medical Society will be held in Des Moines, April 20th to 21st, under the presidency of Dr. Lee R. Woodward, of Mason City. Other officers are: Dr. M. C. Hennessy, of Council Bluffs, president-elect; vice-presidents, Dr. George H. Keeney, of Mallard; Dr. William J. McGrath, of Elkader; secretary, Dr. Robert L. Parker, of Des Moines, and treasurer, Dr. James A. Downing, of Des Moines. An excellent program has been prepared and the guest speakers include: Dr. Norman F. Miller, of Ann Arbor; Dr. Anton J. Carlson, of Chicago; Dr. William N. Hahn, of Omaha; Dr. Alfred W. Adson, of Rochester; Dr. Clarence D. Selby, of Detroit, and Dr. Walter H. Judd, of Washington. There will be a number of panel discussions.

Penicillin Production.—The War Production Board announces that with a view to increasing penicillin production, representatives of twenty-one producers have authorized a committee from their industry to explore, with the War Production Board, various forms of agreement for the exchange of technical information and patents. This committee will study possible contract forms and recommend an agreement between producers and the War Production Board. In granting authority for the explorations of the committee, producers' representatives expressed themselves as desirous of doing everything possible to increase the production of penicillin within the shortest period of time. The committee members are: A. H. Fiske, Eli Lilly and Company, Indianapolis, Ind.; H. C. Fritsch, Parke, Davis and Company, Detroit, Mich.; Carleton H. Palmer, E. R. Squibb and Sons, New York, N. Y.; Dr. John Reichel, Reichel Laboratories, Inc., Kimberton, Pa., and Kenneth H. Hoover, Commercial Solvents Corp., Terre Haute, Ind.

Physical Restoration of the Handicapped.—Rehabilitation of the handicapped, so that they may as nearly as possible approximate normal capacity, was called the basic need in vocational rehabilitation by Paul V. McNutt at the first meeting of the Professional Advisory Committee of the Office of Vocational Rehabilitation, held in Washington, on Friday, March 3d. This committee consists of twenty specialists in medical and allied fields, and was appointed by Mr. McNutt to provide professional guidance in planning the new Federal-State program for medical and surgical care under the Barden-LaFollette Act. Michael J. Shortley, director of the Office of Vocational Rehabilitation, said that an estimated million and one half persons may be eligible for rehabilitation under the program authorized by the enactment of the Barden-LaFollette bill. The committee is making recommendations for the advice of State Rehabilitation Services in the following areas of operation: the scope of physical restoration services; professional standards for physicians, hospitals and other facilities providing services under State programs; auxiliary services in the fields of medical-social work, nursing, psychiatric social work, and physical therapy.

Our Cover.—The photograph of the Research Laboratory Building of The Institute of Living, which appears on the cover of this issue, is used by courtesy of George E. Meyers, Inc., photographic illustrators, Hartford, Conn.

Dr. William Henry Welch (1850-1934)

On the Tenth Anniversary of His Death

SOLOMON R. KAGAN
Roxbury, Mass.

Dr. William H. Welch, dean of American Medicine, was born on April 8, 1850, and died on April 30, 1934. Ten years have passed since the death of one of the greatest American medical educators, who advanced pathology, bacteriology and public health in the country; founded laboratories for medical research; created the School of Public Health and Hygiene at Johns Hopkins University; founded the Institute of the History of Medicine and its library; and aided in founding the Rockefeller Institute of Experimental Medicine.

I present here one of Dr. Welch's letters, addressed to Fielding H. Garrison, which is characteristic of the man.

Dear Garrison:

The form of inscription, which I showed you in Washington, read as follows and was a revision of one sent me by J. Collins Warren:

William Thomas Green Morton
Born August 9, 1819
Died July 15, 1868

Before him, in all time surgery was agony. By his use of ether in a capital operation at the Massachusetts General Hospital on October 16, 1846, anæsthetic inhalation became known to the world as a safe, certain and complete means to annul pain and a new era in surgery began, a discovery which enables man to undergo, without the sense of pain, the severest physical trials to which human nature is subject. Morton. A priceless gift that all mankind may share.

Weir Mitchell.

Comments

Dr. Wolcott thinks "anaesthesia by inhalation" is preferable and I concur.

Cameron Forbes, who belongs to the Jackson tribe, which resents very much the recognition of Morton, lighted on the word "discovery" in the quotation from Morton, and I think that it would be well to avoid it, although not on the grounds which he raised. The real scientific discovery is that of the anaesthetic properties of a volatile agent and this does not belong to any of the claimants—Long, Wells, Jackson or Morton. Morton did more than anyone else to demonstrate the applicability of this discovery to surgery. To get rid of this vulnerable point in the inscription, and at the same time retain the Quotation from Morton, the forms II, III, or IV are suggested. As stated, if it is not necessary to insert a quotation from Morton at all, I prefer the simple statement marked I. Perhaps you can find a quotation from Morton which will remove the difficulties.

The quotation which Morton's daughter, Mrs. Otis, wishes used seems to me impossible for the tablet. It is, "I have a work to do in this world. The time will come when I will (shall) do away with pain".

No scientific man would indulge in such a boast beforehand. The quotation which I substituted for this I found in Rice's book, *Trials of a Public Benefactor*, p. 301.

Perhaps you can find something better than either in the rather rare Morton literature, which he got out in circular and pamphlet form, soon after Oct. 14, 1846... As regards the words, "safe, certain and complete" these, as you know, were employed by the older Henry J. Bigelow to indicate what Morton did and his predecessors did not. They have become a kind of formula, at least in Boston, and I think it well to retain them, as I agree that they describe pretty accurately the points characterizing Morton's accomplishment as compared with those of Long and Wells, although the main thing is that Morton's achievement became known to the world and started the new era. William H. Welch

Welch holds a notable place in the history of medicine. He succeeded in his great work because he was endowed with talent, energy and the pioneer spirit, and loved his profession. His character and commanding personality inspired respect, admiration and love.

Book Reviews

Biochemistry of Cancer

The Biochemistry of Malignant Tumors. By KURT STERN, M.D., New York, N. Y., formerly research associate of the University of Vienna; and ROBERT WILLHEIM, M.D., University of the Philippines, Manila. Brooklyn, N.Y.: Reference Press, 1943. Pp. 951. Price $12.00 .

Cancer research workers and clinicians will find this survey of the biochemistry (and biophysics) of cancer, a mine of well-organized information. Formerly associated in research and clinics in Vienna, and authors of a monograph, in German, in 1936, close collaboration between the authors has been impossible since 1939, and on December 7, 1941, Dr. Willheim was captured at the University of the Philippines, Manila. Dr. Stern finished the book alone.

The literature survey presents diametrically opposing experimental results and conflicting theoretical interpretations, without prejudice. Attempts to reconcile such contradictory reports are in some sections strengthened by the authors' special interest and work with tumor metabolism, serodiagnostics, and the part played by the reticuloendothelial system in malignancies.

Many references are included, and evaluated more fully than could be done by Americans less familiar with foreign journals. This is especially seen in discussions of the papers, published in German, by the Europeans and the Japanese. British and American workers have been fully credited in thorough and sometimes surprisingly acute fashion. It has been impossible, of course, to give proper weight to the reports of all cancer workers. In some of their papers, the degree of *authority* may outweigh the real value of the findings, which are often based on insufficient data and published prematurely.

There are ten chapters, the one on organic chemistry consisting of 160 pages, with 1,011 footnote references. The first chapter, on inorganic chemistry, is a masterly presentation of the evidence on the role of inorganic factors in tumor growth. The danger of radium overexposure is stressed. Shear's carefully composed monograph is quoted to show that except for the retarding effects of calcium, and the slight growth-stimulating action of potassium, the mineral content of tumors is not significant.

In the chapter on physical chemistry we are warned about the powerful carcinogenic action of some types of irradiation. Chapters on enzymes, nutrition and metabolism are followed by some eighty pages on the endocrine glands. In general, nutritional or endocrine therapy is suggested to follow the surgical removal of tumors, to prevent recurrences and metastatic spread.

In the chapter on immunology, inoculations, diet, endocrine therapy, and sera are all given attention. The reticuloendothelial system is considered with reference to tumor inoculations, and in tumors that formed as a result of the disturbed equilibrium due to endocrine or dietary treatment. Mesenchymal activity and lack of it after irradiations or injections with carcinogenic hydrocarbons are also considered fully.

The chapter on viruses is included with heredity and growth-factors, under biochemical aspects. In these discussions controversial points are given full consideration. The final chapter, on tumor diagnostics, like the others, is a sane and well ordered survey. We are not led to believe that any reliable biological or chemical method of tumor diagnosis has been found.

This important book should be extremely valuable for the busy clinician, and for the cancer worker who is not too self-centered to read about the experiments and clinical findings of others.

Gastroenterology

Gastroenterology. Volume I: The Esophagus and Stomach: Examination of the patient, and diagnosis and treatment of disorders of the esophagus and stomach, including duodenal ulcer. By HENRY L. BOCKUS, M.D., professor of gastroenterology, University of Pennsylvania Graduate School of Medicine. In three volumes. Fully illustrated, including many in colors. Philadelphia and London: W. B. Saunders Company, 1943. Pp. 831. Price for three volumes and index, $35.00.

Dr. Henry L. Bockus, professor of gastroenterology, Graduate School of Medicine, University of Pennsylvania, is presenting a modern and complete series of volumes on the gastroenteric tract. He has divided this work into three volumes, the first volume at hand being devoted to the esophagus and stomach.

The book is most comprehensive, covering practically every abnormal condition which may be encountered in the gastroenteric tract up to the small intestine. The author promises to tackle the rest of the tract in the next two volumes.

In the modest introduction the author states that the subject is so vast that he has had to call upon many other workers for much of his data, but he has so well integrated the material that it is difficult to realize that the work is composite in any way. The author has woven the material together and assembled it so expertly that every part of this eight hundred page book is well correlated. He has presented objectively all controversial subjects, such as the ulcer-cancer relationship, considering all points of view, and has arrived at sound conclusions. The author's reasoning in arriving at these conclusions seems fundamentally sound, and we are certain that many internists and physicians will appreciate this volume and anticipate the future ones.

Errors and Safeguards in Surgery

Surgical Errors and Safeguards. By MAX THOREK, M.D., LL.D., D.C.M., F.I.C.S., etc., professor of surgery, Cook County Graduate School of Medicine. With a foreword by SIR HUGH DEVINE, M.S., Hon.F.R.C.S. (Eng.), F.R.A.C.S., F.A.C.S. (Hon.), etc. and a chapter on Legal Responsibility in Surgical Practice, by HUBERT WINSTON SMITH, A.B., M.B.A., LL.B., M.D., associate in medicolegal research Harvard Law School. Fourth edition, completely revised. With 794 illustrations, many colored. Philadelphia, Montreal and London: J. B. Lippincott Company, 1943. Pp. 1085, Price $15.00.

This reviewer has often said that the best book any physician could ever write would recite his blunders and mistakes and honest errors rather than his successes. Well, here is that book in a fourth edition; the first appeared in 1932. This decade has been one of astonishing advancement in surgical diagnosis and practice, and, therefore, the volume had to be entirely rewritten. For example, the great strides in plastic surgery and in electrosurgery made the inclusion of "errors" imperative. This in turn called for a review

of the surgeon's responsibilities from a medicolegal point of view which has been well written by lawyer-doctor Smith of Harvard.

To illustrate the intestinal fortitude which any surgeon must have to "tell all", the author, speaking of surgery of the head in general, says on page 165: "During my second year in practice . . . a youth in the late twenties developed a furuncle on the upper lip . . . On the advice of a consultant, I decided to resort to radical measures. An incision yielded a slight quantity of serosanguineous fluid . . . The patient rapidly became worse . . . and succumbed forty-eight hours later." In these days even an extremely inexperienced surgeon probably knows that this type of infection is a surgical *noli me tangere,* but it is a splendid illustration of what *not* to do. There are also many instances of near fatalities where correction of error was possible and life was saved. It is fascinating to read of errors and pitfalls, but it is even more than that to profit by the experiences of others and thus to bring one's own daily work a step nearer to perfection. It is precisely here that this splendid volume will be of the greatest value to every doctor everywhere. Truly this is an indispensable book.

Physiological Basis of Medical Practice

The Physiological Basis of Medical Practice. A University of Toronto Text in Applied Physiology. By Charles Herbert Best, M.A., M.D., D.Sc., F.R.S., F.R.C.P. research associate in the Banting-Best Department of Medical Research, University of Toronto, and Norman Burke Taylor, M.D., F.R.S. (Canada), F.R.C.S. (Edin.), professor of physiology, University of Toronto. Third edition, illustrated. A William Wood Book. Baltimore: The Williams and Wilkins Company, 1943. Pp. 1942. Price $10.00.

The authors endeavored to write a book which would serve to link the laboratory and the clinic, and would therefore promote continuity of physiological teaching throughout the preclinical and clinical years of the undergraduate course. When the principles underlying diseased states are pointed out to the medical student, and he is shown how a knowledge of such principles aids in the interpretation of symptoms or in directing treatment, he will take a keener interest in physiological studies. When such studies are restricted to the classical aspects of the subject, apparently remote from clinical application, the student is likely to regard them only as a task which his teachers in their inscrutable wisdom have condemned him to perform. Too often he gains the idea, from such a course, that physiology is of limited utility and comes to believe that, having once passed into the clinical years, most of what he has "crammed" for examination purposes may be forgotten without detriment to his more purely medical studies. Unfortunately, he does not always realize at this stage in his education how great has been the part which physiological discoveries have played in the progress of medicine, and that the practice of today has evolved from the "theories" of yesterday. Many physiological problems can be approached only through animal experimentation. Advances in many fields, most notable in those of carbohydrate metabolism, nutrition and endocrinology, bear witness to the fertility of this method of research. On the other hand, many problems can be elucidated only by observations upon man, and physiology has gained much from clinical research. The normal human subject as an experimental animal possesses unique advantages for many types of investigation; and in disease, nature produces abnormalities of structure and function which the physiological laboratory can imitate only in the crudest way. Within recent years the clinical physiologist, fully realizing these advantages and the opportunities afforded by the hospital wards, has contributed very largely to physiological knowledge. In many instances, clinical research has not only revealed the true nature of the underlying process in disease, but has cast a light into some dark corner of physiology as well; several examples of clinical investigation which pointed the way to the physiologist could be cited. In the last century knowledge of the processes of disease was sought mainly in studies of morbid anatomy; biochemistry was in its infancy and many of the procedures now commonly employed for the investigation of the human subject had not been devised. Today, the student of scientific medicine is directing his attention more and more to the study of morbid physiology in his effort to solve clinical problems. This newer outlook has borne fruit in many fields. It has had the beneficent result of drawing the clinic and the physiological and biochemical laboratories onto common ground from which it has often been possible to launch a joint attack upon disease. This new edition coordinates all branches of science in the cause of unravelling mechanism and management of human disease.

Manual On Convulsive Seizures

Convulsive Seizures. How to Deal With Them. A Manual for Patients, Their Families and Friends. By Tracy J. Putnam, M.D., professor of neurology and neurosurgery, College of Physicians and Surgeons, Columbia University. With twelve illustrations. Philadelphia, London, and Montreal: J. B. Lippincott Company, 1943. Pp. 168. Price $2.00.

This little manual is primarily an extended consultation reduced to print for reference. Unfortunately, it deals with convulsions in general rather than with individuals in particular. But it has a further purpose beyond giving general advice to individuals. There are many aspects of the problem which concern the public interest. Humanitarian and economic motives should impel, 1, a reformation of the conventional attitude toward convulsions; 2, an improvement of the facilities for caring for the large number of patients—many of them indigent—who suffer from them; 3, a reconsideration of the legal aspects of the situation; and 4, a greater measure of support for scientific investigations of the nature and treatment of the disorder.

The book presents three types of information: that which has long been the common property of the profession, with slow accretions since the time of Hippocrates; that which is based on the special studies of the past few years; and finally that which is drawn from the author's own experiences or represents his personal point of view. There will, of course, be many qualified specialists who will find that point of view unacceptable, and to them the book will be of little value. Since this manual exists for the sake of patients, and is intended to meet their needs, the author is particularly anxious to hear from his readers in regard to the problems arising in their minds, which are unanswered herein.

Dermatology

Manual of Dermatology. Issued under the auspices of the Committee on Medicine of the Division of Medical Sciences of the National Research Council. By Donald M. Pillsbury, M.D., Marion B. Sulzberger, M.D., and Clarence S. Livingood, M.D. Philadelphia and London: W. B. Saunders Company, 1942. Pp. 421. Price $2.00.

Skin diseases are of greater importance in the military service than in civil life. Although there are few fatalities from these diseases they result in a considerable loss of effective man-power and partial incapacity of a material number of the personnel of many commands. Most of the texts on dermatology are too bulky to permit their use under military conditions. This manual was prepared under the auspices of the Division of Medical Sciences, National Research Council, with the intention that it should provide a compend of the principles of diagnosis and treatment of the more common skin diseases.

Communicable Diseases

Handbook of Communicable Diseases. By Franklin H. Top, A.B., M.D., M.P.H., director, Division of Communicable Diseases and Epidemiology, Herman Kiefer Hospital and Detroit Department of Health, and collaborators. With seventy-three text illustrations and ten color plates. St. Louis: C. V. Mosby Company, 1941. Pp. 982. Price $7.50.

This handbook is an unusual contribution to communicable diseases and parasitic infestations. Although special emphasis has been given to pneumonia, syphilis and gonorrhea, all contagious diseases are discussed in great detail for the benefit of the practitioner. The diseases are classified by common portal of entry after a preliminary consideration applicable to all communicable disorders. The newer knowledge of immunology, epidemiology and preventive medicine is crystallized concisely for immediate application to the individual disease. Each entity is approached from the viewpoint of nature, history, etiology, epidemiology, immunology, pathology, symptomatology, complications, prognosis and treatment. An unusual feature is the nursing care of the patient in each disease. Illustrations abound throughout the book. The text is invaluable for all concerned with infectious diseases.

New Obstetric Atlas

Atlas of Obstetric Technic. By Paul Titus, M.D., obstetrician and gynecologist to the St. Margaret Memorial Hospital, Pittsburgh. Illustrations by E. M. Shackelford. St. Louis: C. V. Mosby Company, 1943. Pp. 180. Price $7.00.

Sometime ago Dr. Titus wrote a book which was extremely well received, *The Management of Obstetric Difficulties.* He has now prepared the present volume on obstetrical technic which presents the practice of obstetrics primarily from a pictorial point of view with the excellent illustrations expertly done by Miss Shackelford. One needs little text to follow the story and that is what you get in this book.

It is simple but, nevertheless, highly useful. Some teachers depend on words and others on visual appeal. The same is true of scholars: some can graphically fix in their minds a procedure when it is presented pictographically, whereas others do better from a careful and elaborate text. There is also a third group of students who can supplement their verbal learning with the aid of a pictorial presentation. At any rate, we have seldom seen such excellent drawings from a practical point of view.

The book is not limited to obstetrics in the narrow sense of the word; it also contains sections dealing with sterility and methods of diagnosis which the author regards as obstetrical rather than gynecological problems. We feel that the book is an excellent adjuvant to any obstetrical textbook which presents the fundamental principles.

Mental Diseases

The Nature and Treatment of Mental Diseases. By Thomas Verner Moore, O.S.B., Ph.D., M.D., professor of psychology and psychiatry, Catholic University of America. With a foreword by Edward A. Strecker, M.D., Sc.D., F.A.C.P., professor of psychiatry, Graduate and Undergraduate Schools of Medicine, University of Pennsylvania. New York: Grune and Stratton, 1943. Pp. 360. Price $4.00.

One of the advantages of this book is that it leads back to psychiatric understanding from the description of highly interesting and pertinent case reports. Thus, one gets the feeling that the clinical phenomena and the needs of the mentally sick patient build the framework of formalized psychiatric concepts. This is as it should be. The test of psychiatry, as an art or as a science, is its utilitarianism—its capacity and ability to understand and meet the needs of those who are sick in mind. Dr. Moore's contribution clearly interprets this sound principle. The individual and the family are studied in their "distress of mind"; the unit and social disorganization that is produced is analyzed; the application of restorative psychiatric formulæ is exemplified. Dr. Moore's book will be helpful to the psychiatric clinician irrespective of his particular psychiatric beliefs; to physicians and to medical students; to psychiatric nurses and to social workers.

Cytochemistry

Biological Symposia. Volume X. Edited by Jaques Cattell, Lancaster, Pa.: The Jaques Cattell Press, 1943. Pp. 334. Price $3.50.

Volume X of the Biological Symposia is devoted to cytochemistry which embraces the physical and chemical study of cytoplasm. The book contains a series of papers by eminent scientists and covers a wide variety of cellular studies. Much that has been discovered in recent years is presented, some of the newer discoveries being those revealed by the ultracentrifuge.

There are studies on the chemistry of the cells, electrolytic studies, and much is told about the morphological constitution of the cells. The volume contains over a dozen excellent papers on the foregoing subjects.

Minor Surgery

Minor Surgery. Edited by Sir Humphry Rolleston, Bt., G.C.V.O., K.C.B., M.D., F.R.C.P., and Allan Moncrieff, M.D., F.R.C.P. The Practitioner Handbooks. London: Eyre and Spottiswoode, 1942. Pp. 223. Price 16s net.

This is a handy little tome and like so many of the books we have received recently from England is the acme of simplicity. Most of the subjects covered could be expanded into separate booklets but the book as it is should prove of value to the general practitioner.

The contributors to this little volume, of which there are about eighteen, are all well-known surgeons in England who have specialized in the different subjects which they cover, from minor wounds to gynecology. We like the book.

Critique

The Healing Art According to an editorial in the *American Journal of Public Health* for March 1929, medicine had too long been a mere healing art and clinical medicine was too much extended in American medical schools which largely neglected preventive medicine, bacteriology, and hygiene. Many graduates of leading universities were said not even to know what maritime quarantine was, nor could they give accurately the insect-borne diseases of this country. "Instead of decreasing the number of hours given to preventive medicine and its various branches, they should be increased, and the importance of prevention should be magnified rather than subordinated to treatment and cure. Recognizing fully the wonderful advances in medicine and surgery, and the appeal which the relief of suffering and restoration to health always carry, it can still be said that prevention is more important than cure. Too long has medicine been regarded as the healing art. It is time for a readjustment of emphasis. The medical schools which fail to read the signs of the times will find their graduates more and more replaced by those of nonmedical schools which lay stress on biology, sanitary engineering, and kindred subjects." Well, did they?

Marriage In March 1929, a committee appointed by the Federal Council of Churches reported on Ideals of Love and Marriage. In brief they concluded that the ideal marriage could make no compromise with lax sex relations, that the danger of companionate marriage was that of putting sex first, that a woman of self-respect could be the life mate of one man only, and that "divorce, even when allowed by the church, must be looked upon as a tragic and humiliating failure". This brings us to an interesting article by John R. Ernst on Little Known but Frequent Causes of Divorce from the Viewpoint of a Psychiatrist (*Medical Journal and Record,* March 6, 1929, p. 263). According to this authority the real causes of divorce were neglected in most discussions. The emotionally fixated, he held, should not marry: they were too tied to their parents. Homosexual types were much more frequent than laymen supposed and were unfit for matrimony, the lesbian often being sadistically nagging. Adult infants who cannot forget childhood have to have each need catered to and each whim honored. Victims of pelvic disorder and endocrine disturbances which react on nerves badly are also poor risks. Lack of premarital instruction regarding frigidity and certain physical abnormalities which make coitus difficult or painful, and the presence of mild types of emotional disorders which good psychiatry could correct, also often cause divorces. "Psychiatrists are unanimous in the belief that there is no single factor that compares with sexual incompatibility as a cause of unhappy marriages." Yet, Dr. Collins, in the Detroit *News* for December 16, 1928, was quoted as saying: "In my opinion love is no reason at all for marrying!" While sex incompatibility destroyed love, Dr. Ernst did not think arranged marriages was the solution. Instead, he held that for those contemplating matrimony there should be marriage instructors especially trained in the physiology and psychology of sex, and schools for those about to undertake the plunge. He thought inane women's clubs should take this idea up instead of wasting so much time on free verse.

Hell in Youth Ernest R. Groves wrote on "Adolescent Strain and Social Pressure", in *Social Forces* for March 1929. He showed that Freud, as well as Jung, Kempf, Adler, White, and Stekel knew the problem of adolescent adjustment to be social as well as sexual. He gave references and quotations in abundance. He related all this to new social and mechanistic aspects of our life and said that adolescence could no more be considered purely in terms of sex than that a coarse diet to cure all ills could be advocated scientifically. We live much differently from the primitives and, even then, as a reading of Margaret Mead's *Coming of Age in Samoa* showed, these primitives had some difficulties of their own at adolescence. Old physical sex then rears up its ugly form. There is a desire for a life partner. Home ties are broken and vocational necessity arises. There is social pressure on sex in primitive quite as in civilized society. However, we cannot revert to savage standards, for the cost would be too great. Human beings can stand reality, but not the artificial prohibitions which curb too rigidly. Youth itself finds absolute freedom incompatible with life in society; the sex code cannot be divorced from all other principles and interests. Our whole life is involved in the general biological problem of sexual adjustment.

Remember Dr. Cotton? Dr. John N. Thomas, commenting on Miller's paper on Psychic Factors in Physical Disease, (*New Orleans Medical and Surgical Journal,* March 1929, p. 617) told of the case of the daughter of a Yale professor, in which a diagnosis of dementia praecox was made by Dr. Floyd Haviland, one of the best psychiatrists in the country. But the father of the patient said that no child of his could possibly turn out that way, so he took her to Doctor Cotton's then famous New Jersey Institute for exodontia. While she was in a perfectly healthy physical state they pulled out all her teeth, good and bad, with no results. This made them very unhappy so they took her tonsils out. That didn't work either, so they resected a portion of her colon "without results except death". So that worked. Dr. Thomas believed there was rarely necessity for surgery in mental cases.

Now How About Sullivan County? In the *Medical Journal and Record* for February 20, 1929, H. M. Vaupel wrote in, deploring the lack of physicians near North Branch, N. Y. He said the village needed a doctor. He mentioned two overburdened physicians six or eight miles away who were not always available and said that the resident physician was getting too old to be depended upon. He promised a good practice and cheap rented house to any doctor willing to take a chance there. Did anyone take the offer up? How are things in Sullivan County now under wartime conditions?

The Critic

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MARCH 1944

Medicolegal Notes

When Do Statutes of Limitation in Malpractice Cases Begin to Run?

It is generally held that the period of limitations for malpractice actions commences from the date of the wrongful act or omission, rather than from the date of the damages caused. Annotation in 74 A. L. R. 1318. This is the prevailing rule in California, Iowa, Maryland, Massachusetts, Montana and Vermont.

When the malpractice charged is a breach of duty correctly to diagnose the nature and cause of the plaintiff's disability, treatment and prescription must necessarily be distinguished from diagnosis. The trial court reasoned: "The injury to the patient's legal rights which gives rise to the cause of action occurs at the time that it is charged the correct diagnosis should have been made, for that is when the physician broadened his duty. That reasoning is supported by the above rule. And then the Nebraska Supreme Court, Williams vs. Elias, 140 Neb. 656, 1 N. W. 2d 121, reversing judgment for the defendant in a malpractice action and remanding the case for further proceedings, discussed decisions which have not applied the foregoing rule, but did not endeavor to set out all the cases cited touching this question. It quoted Haan vs. Winter, 288 Mich. 293, 241 N. W. 925, supporting a rule announced in Ohio and Minnesota cases, as follows: "When did plaintiff's cause of action accrue? Until treatment of the fracture ceased the relation of patient and physician continued, and the statute of limitations did not run. Schmit vs. Esser, 185 Minn. 354, 326 N. W. 622, and supported with annotation in 74 A. L. R. 1312. While decisions are not in accord upon this question, we are satisfied that in such an action as this the statute of limitations does not commence to run while treatment of the fracture continues. Failure to give needed continued care and treatment, under opportunity and obligation to do so would constitute malpractice. During the course of treatment plaintiff was not put to inquiry relative to the treatment accorded him."

In determining which of the foregoing rules should be adopted in Louisiana, the court in the Williams vs. Elias case found it necessary to review the definitions applicable, i.e., of diagnosis and of malpractice.

The defendant physician contended that the faulty diagnosis, in and of itself, constituted the breach of duty owing by the physician to the plaintiff in this case; that the resulting damage to the plaintiff by virtue of the treatment by the physician was separable from the diagnosis and no recovery could be had if there was negligent treatment.

After reviewing the medical and general definitions of the two words, "diagnosis" and "malpractice", the court noted that in the very definition of malpractice, "treatment" is the predominating word and is not separated from "diagnosis". "This would indicate," the court said, "that in the treatment of a patient the diagnosis might change from time to time, and it is commonly accepted in the medical profession that the diagnosis in the first instance is not binding on the physician. He should have the right, during the course of treatment, to change the diagnosis. With this in mind, it would seem that the construction placed upon the alleged malpractice of the defendant in the instant case is too narrow."

The two-year statute of limitations in the malpractice suit was held not to commence to run until the treatment ended.

Compensation Claimant's Right to Refuse X Ray Examination or Treatment

In an action for compensation under the Longshoremen's and Harbor Workers' Act the claimant was held not required to submit to an x ray examination with the use of a lipiodol injection. The trial judge was held within his discretion in refusing the Achilles test, and, if error, the refusal was held harmless. As to the Lipiodol test, the Louisiana statute which was invoked provides only for an examination by a medical practitioner. It contains no provision covering the refusal of an employee to submit to medical examination or operation. While an employee must accept simple and harmless treatment, the judge, where there is a conflict of opinion among medical experts as to its effect or its danger, has a discretion to order or to refuse to order it.

There was testimony that the lipiodol injection might in this case cause serious damage and that, after it was undergone, the conclusions from it were largely negative. Sullivan, Long and Haggerty vs. Washington, Fifth Circuit Court of Appeals, 128 F. 2d. 466, affirming judgment for the plaintiff in the Federal District Court of Eastern Louisiana.

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—Swartz & Reilly, "*Diagnosis and Treatment of Skin Diseases*," p. 66

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TRUTH OF THE MATTER

Good Nutrition Under Rationing

T. SWANN HARDING
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Today food is a munition of war. It is no longer a mere means of pleasantly satisfying appetite. When certain foods are scarce they must be equitably allocated.

Food rationing, a wartime necessity, will mean a great deal more to some people than to others, for instance, to those with strong food prejudices and likings than to those who can eat almost anything and be satisfied. It will also mean more to those on high and, we hope, on low incomes, than to those in the middle income level who should be able to remain about as well nourished as ever.

Rationing is closely tied to good nutrition, for the effort is to provide, for all, such foods as will maintain them well enough to perform their accustomed tasks without loss of health or stamina. It is a case of effecting equality in the distribution of scarcities that are often artificial, i.e., we cannot afford bottoms to ship in certain foods or the labor and materials it requires to produce them here. The step is taken to enable us to feed our armed forces well and to share food with our less fortunate allies.

Americans still tend to regard good nutrition as primarily an individualistic or a family problem, not a larger national problem. This is just as unfortunate as it is that many are willing to do with less in order to enable brother Bill or son Jack in the armed for to have what he needs.

Rationing is really a national problem and sound n trition a global one. We tend to have a home-and-co sumer-centered feeling about such matters; we mu get away from such provincialism. The thing is mu bigger than that. The necessity for rationing mere to be certain that disastrous famines do not occ widespread over the world will follow us many yea after the war ends. We must learn to think national and globally about the scientific sharing of scarcity.

In general, people who eat correctly are health people. They have strong bodies and sound minds them, good morale, plenty of energy. They are ef cient and alert, resistant to disease and to epidemi Such healthy people free doctors and nurses for mo urgent purposes in the national emergency. Health citizens also are useful citizens, good fighters, and goo workers. They produce strong children.

Rationing can make a fairly nutritious diet availab to all citizens. It can thus aid us in winning the w and later in winning the peace, and the healthy young generation can carry on better. At this time it is o patriotic duty to learn about nutrition and to eat th right food.

Too much should not be expected of rationing und all circumstances. The British have been compelle to lower their national nutritional standard dange ously, for instance, in order to free themselves for th task of winning the war. Not only is their diet mono onous and relatively unpalatable, it is partially de cient. The tuberculosis rate is rising, there are increase indications of vitamin C deficiency, the growth

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the children is retarded, and almost everybody is tired.

Now even under normal conditions all the people in the British Isles were not well fed. Only the top tenth, the upper income class really had food in abundance. There is evidence, nevertheless, that had the food then been distributed equitably all would have had good diets. That was not done in Britain any more than it was done here. Under wartime conditions the government has had deliberately to lower civilian dietetic standard as much as it dares.

The logic of rationing in Britain, where so much food is imported, calls for a civilian ration just sufficient to prevent widespread outbreaks of dissatisfaction, physical and mental exhaustion, or ill-health. In the United States, at least for the present, we can look forward to something better than this, though our days of bountiful eating are over for many years to come and we may as well recognize the fact.

It would be more correct to say that bountiful eating is over for the upper crust. For an American Institute of Public Opinion poll, announced December 6, 1941, indicated that one-third of our people were poorly fed, just as earlier surveys of government scientists had shown. While nutrition experts had for a generation advised a quart of milk a day per child and a pint per adult, the typical family the nation over consumed less than half that amount at the end of 1941!

This deficiency was found in nearly all families with incomes of around $25 to $30 a week, though sixty-five percent of the persons in such families knew the scientific requirements for milk consumption. Price was the determining factor. Already six million families had revised their diets downward during 1941 becau prices had gone up. This self-rationing meant a redu tion in the meat, eggs, butter, milk, and fresh veg tables consumed, the very foods nutrition scientis recommended most highly for increased consumptio

Obviously we rationed ourselves by price in 19 and 1942 as we had for many years before. But assa of both rural and urban populations published thr indicated widespread malnutrition. In some rural a groups the diets were calory-deficient one hundred pe cent; they were often fifty percent deficient in vitan A and twenty percent deficient in vitamin C. The d rector of the Milbank Memorial Fund said that fro twenty-five to fifty percent of our population was th undernourished.

A survey of children from families in different ec nomic brackets made in Chicago revealed that t dietary level was closely associated with family incon However, even when the income was good—from $4,0 to $10,000 a year, ten percent of the diets were low protective foods, a figure which rose to thirty-two pe cent in families with marginal incomes and to sixt four percent among children of parents on relief. Abo forty percent of the children at all income levels ha too low an intake of protective foods.

It is apparent that self-rationing on a price ba did not work well, viewed scientifically. This conditi was mitigated somewhat by devices invented to stim late consumption among low-income groups, such the low-price milk, the school-lunch, and the foo stamp plans. The food-stamp program began in M 1939 and was discontinued as a war casualty on Mar 1, 1943. At peak it assisted four million people.

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For the present the school-lunch program will continue. At peak it served a monthly average of six million children. It also began in 1939. The school-milk program began later, but in the current year it is serving 2,700,000 school children. These efforts to mitigate the severity of food rationing by price should be less necessary while we are at war, if we ration scientifically on a basis of need. But if we later return to price, or insofar as low-income groups are slighted even under a rationing system, they are very necessary.

Not even the strict British rationing system yet provides fully for the poorer classes even though the government tosses in a heavy subsidy. Every time the weekly butter or sugar ration exceeds two ounces many people cannot afford to purchase all that their coupons would permit. Extra provision is therefore made in the British restaurants and canteens where plain nourishing food can be procured at very low prices or, if necessary, entirely free.

This is not just a matter of benevolence either. Nobody is being coddled or pauperized. The point is that drastic undernourishment is destructive of the war effort and must be avoided at all cost. We have plenty of evidence based on careful clinical studies that low-grade deficiency diseases, destructive of energy and stamina, have been very common among us under the price-rationing system. Often the skipping of meals or the unwise economizing on food purchases causes this; but more often still plain poverty is at fault.

As two of the best informed investigators expressed the matter: "The evidence at our disposal warrants the conclusion that dietary inadequacies and malnutrition of varying degrees are of frequent occurrence in the United States, and that the nutritional stat of an appreciable part of the population can be di tinctly improved. If optimal nutrition is sought, n mere adequacy, then widespread improvement is po sible." This was written in March 1942 by James McLester and Henry C. Sherman.

The results of malnutrition in wartime can be di astrous, as was proved in Germany in 1918. Wheth or not susceptibility to infection is affected as muc by poor diet, as some maintain, there is sound evidenc that resistance and the ability to fight off infection are aided by good nutrition. Immunity to some infec tions also seems to be impaired by starvation. An i creased vitamin intake supplemental to an alreac good diet will not, however, prevent colds.

When it comes to physical efficiency and industri productivity not only food but the frequency of ea ing it is important. Some studies indicate that on properly spaced and more frequent meals can pr duce maximum bodily efficiency. Supplemental feed ings of oranges or of bananas and milk, for instanc produced less tired, more cheerful, and more attentiv workers, and improved the social atmosphere of bo factories and offices. There was a marked decrease al in absenteeism and in constipation.

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(To be continued)

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Psychiatric Breakdown in Battle

Warren T. Brown and Merrill Moore (*Military S*
geon 94:3, March 1944) present a report of some p
disposing factors to which psychiatric battle casualt
can be attributed. A study was made of 146 soldi
who came from three regions that had participated
the same action, in the same location, at the same ti
and who were examined in a uniform manner. The
sults of this study indicate that certain factors ot
than battle trauma determine whether a sold
breaks down or continues fighting. Most promin
among these are: the general factor of inadequate p
sonality, and the particular factor of cerebral conc
sion. From the results of this study the authors ha
drawn the following conclusions: However carefu
soldiers in tactical units are selected a certain numb
of psychiatric breakdowns may occur during the fi
serious engagement or baptism of fire. Nevertheless
more thorough understanding of the kinds of soldi
who break down should lead to a definite reduction
the number of psychiatric breakdowns precipitated
battle. Several factors must operate in order that t
preventive measure may become effective: There mu
be a more thorough psychiatric examination of soldi
selected for combat duty before they are assigned
that duty. More serious attention must be given to t
decisions and recommendations of psychiatrically o
ented medical officers in order to eliminate those w
are most likely to break down. Psychiatric consulti
service must be made more readily available to co
manders of combat units in order to prevent psychiat
casualties among troops.

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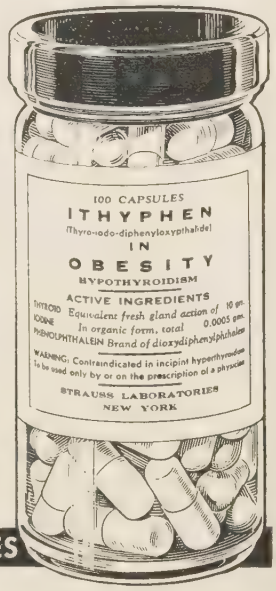

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The medical subjects to be presented include wel ing, in relation to clinical aspects and control of ha ards; noise, as to medical phases and means of preve tion; better health in small plants; the industrial ph sician's opportunity to advance medical knowledg maladjustment and job environment; women in indu try; and panel discussions on "Who Can Work?" an other timely questions. Two clinics, one surgical an the other medical will be held.

The industrial hygienists will examine the heal hazards presented by the new synthetic rubber indu try; radium; solvents; the toxicology of TNT; t possibilities of an excessive silica dust hazard from t extensive quartz crystal industry; also the hazards fro lead fumes encountered in soldering operations and e posure to cadmium, which has begun to cause a numb of cases of poisoning.

The industrial nurses will consider such problems wartime industrial health, industrial nursing, the i dustrial nurse's part in the rehabilitation of psychiatr patients, and nursing ethics in industrial work.

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EULOGY OF THE DOCTOR

THERE are men and classes of men that stand above the common herd the soldier, the sailor, the shepherd not infrequently, the artist rarely, rarelier still the clergyman, the physician almost as a rule. He is the flower of our civilization and when that stage of man is done with, only to be marvelled at in history he will be thought to have shared but little in the defects of the period and to have most notably exhibited the virtues of the race. Generosity he has, such as is possible only to those who practice an art and never to those who drive a trade: discretion, tested by a hundred secrets; tact, tried in a thousand embarrassments; and what are most important, Herculean cheerfulness and courage. So it is that, he brings air and cheer into the sickroom and often enough, though not so often as he desires, brings healing.

by Robert Louis Stevenson

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Occupational Therapy in War and Peace

An exhibition showing the therapeutic work which is being done among the disabled members of the Army, Navy and Air Forces will be held in Philadelphia, April 17th to 30th. This exhibition, the first of its kind ever to be held in Philadelphia, has been arranged by the Art Alliance. The exhibits will include a model occupational therapy shop, with finished and unfinished handicraft on view, and a functional shop where service patients from the Valley Forge General and the U.S. Naval Hospitals will demonstrate the crafts which introduce exercise. A modern living room will also be shown in which the entire furniture and furnishings have been constructed by occupational therapy patients in Army, Navy and civilian institutions. Lieutenant Colonel Howard A. Ruck, Medical Corps, Chief of the Convalescent Training Branch, Army Air Forces, said that throughout the Convalescent-Rehabilitation Training Program of the Army Air Forces' hospitals the useful techniques of occupational therapy have been adapted to military needs. He also pointed out that occupational therapy had gone to war in the hospitals of the Army Air Forces. Dr. Edward A. Strecker, consultant to the Surgeon General, U. S. Navy, said that occupational therapy was a most fruitful psychiatric treatment adjunct. In the large group of psychoneurotic patients, occupation tends to displace the morbid introspections and anxieties which characterize neurotic escapes from the realities of life.

Maternity and Infant Care

The number of babies and their mothers who were cared for under the Emergency Maternity and Infant Care Program totalled nearly two hundred thousand up to February 1, 1944, according to a report issued by the Chief of the Children's Bureau of the U. S. Department of Labor. Approximately thirty thousand new applications were approved in January. Throughout continental United States and in Hawaii, Alaska and Puerto Rico, the program is now in operation or about to be effected. The wives and babies of men in the four lowest pay grades of the Army, Navy, Marine Corps, and Coast Guard are eligible for this service. Hospital and medical care is provided without cost to the wives of these servicemen during pregnancy, childbirth, and for six weeks after the baby is born, and for the infant during its first year. Funds appropriated by Congress for this service are administered by the Children's Bureau through State public health departments.

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Fatal Accidents in New York State

Accidents were responsible for 8,068 deaths in New York State in 1943, according to *Health News*. The rate per 100,000 of population was 58.6 which is practically the same as for 1942 (58.4), the lowest on record. The figures show a substantial rise in the number of home accidents, but these are more than offset by a large decrease in motor vehicle fatalities. Deaths from home accidents in New York State during 1943 totalled 3,945, of which 2,497 were caused by falls, of which 1,912 occurred in persons over sixty-five years of age. Of the remainder, 504 were due to conflagrations, burns and explosions; 438 to absorption of poisonous gas; 127 to suffocation; 57 to poisoning (gas excepted); 35 to firearms; all other causes, 287.

The number of deaths among occupational accidents increased in New York City from 267 in 1942 to 343 in 1943, and decreased in the rest of the state from 426 to 355. Agricultural accidents continued to be the largest single cause of these accidents upstate. There was a total of 698 occupational accidents during 1943 as compared with 693 in 1942. In regard to motor vehicle accidents, following a twenty percent decrease in 1942, the deaths from such accidents decreased an additional eighteen percent in 1943. The main factor in this decrease was undoubtedly curtailed traffic and the lower speed limit. The fatalities from public accidents in 1943 totalled 1,622, as compared with 1,630 in 1942. In New York City the outstanding change was a rise in fatal street car accidents from 60 to 80. In the rest of the state the total number of deaths from this group of accidents showed a slight rise, mainly because of an increase in railroad accidents from 154 to 192.

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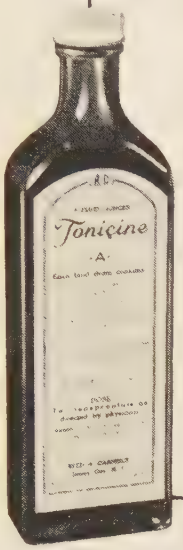

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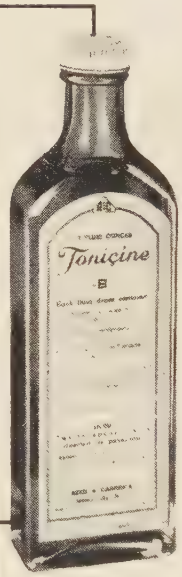

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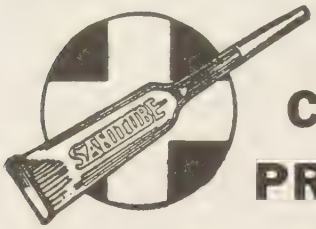

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Military Deaths in 1943

Military deaths for the third year of this war we on a scale comparable to the deaths in the first wo war. The *Statistical Bulletin* of the Metropolitan L Insurance Company (Jan. 1944) estimates that a t of two million belligerents was taken in 1943. The G mans last year lost more men than in the precedi two years and for the first time their killed in acti exceeded those of the Russians, probably by a sizat margin. Axis losses for 1943 are estimated at possil a million for the Germans, more than one hundr thousand for the Japanese, about fifty thousand Italia and fifty thousand Rumanians. Allied losses were ab twenty-seven thousand Americans killed, seventy-fi thousand British Empire forces, six hundred thousa Russians, between twenty-five and fifty thousand Chi ese, many thousand Jugoslavs, approximately thr thousand French, and about the same number combin for Norwegian, Dutch, Belgian and Polish forces.

Battle losses were about fifty percent higher th for the corresponding period in 1918; the parallel however difficult to draw. Germany last year suffer much greater losses than Germany and Austria-Hu gary in 1918. For the other countries, losses last ye were smaller than in 1918.

Total battle deaths amount to about six million, wi three fourths of these deaths accounted for by Russia and German dead. Both have suffered more heavi than in the first world war. Except for Japan, and po sibly Rumania and Greece, battle deaths of oth countries remain well below those of the 1914-19 war. The casualties expected in 1944, however, will u doubtedly raise the total.

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Gas Gangrene

In a report on the outstanding study of gas gangrene made by MacLennan and published in the *Lancet* (2, 943), the *British Medical Journal* (Nov. 20, 1943) underlines several interesting points. MacLennan's definitions of various types of anaerobic wound infection distinguish several other conditions from true gas gangrene. The more uncommon Clostridia infections were personally observed often enough to define the clinical picture which they produce for the first time. From the material gathered in all cases of gas gangrene among the casualties in a whole series of campaigns in the Middle East and elsewhere, it appears that mixed infections have a graver prognosis; infection by the Clostridum histolyticum was invariably fatal. Sulphonamide treatment was disappointing; this is partially explained perhaps by the prevalence in Libya of Clostridum Oldematiens, an organism that is relatively insusceptible. Combined sulphonamide and antitoxin treatment proved more effective.

In comparing the truly scientific material furnished by MacLennan and the somewhat casual and incomplete returns from questionnaires on diagnosed and treated cases in the three fighting Services and the Emergency Medical service for casualties treated in England, including air raid victims, the only common factor is the evident need for early antitoxin treatment.

The scanty information on and the suspected inaccuracy of reporting of the cases in England led the writers to emphasize the difference in results to be obtained between form-filling research, and personally directed investigation. A plea is made for every surgeon to give others the benefit of his experience.

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Russian War Relief

Officers of Russian War Relief report that $16,781,333.74 worth of relief supplies were consigned to the Soviet Union during 1943. Supplies worth a total of $15,596,600.63 were shipped and an additional $1,182,733.11 worth was in transit at the year's end. The American people contributed $7,742,430.32 worth of clothing, seeds, medical supplies and miscellaneous gifts in addition to cash contributions through war chests and the National War Fund. A total of $16,273,392.72 in cash and contributions in kind was received during the year. The total administrative, promotion and operating costs, including expenses of more than four hundred Russian War Relief committees throughou the country totalled only 4.43 percent of income. Th agency's report showed that 70.07 percent of shipmen were clothing; 20.42 percent, medical and surgical sup plies; 4.35 percent, seeds and foodstuffs, and misce laneous relief items such as sewed and knitted ga ments, watches and medical books.

Mr. Edward C. Carter, president of the Russian W Relief, said that the $21,000,000 goal for 1944, recentl announced by the board of directors, will be reache by a continued goods in kind campaign and the pu chases of clothing and medical supplies with a $9,000 000 allocation from the National War Fund.

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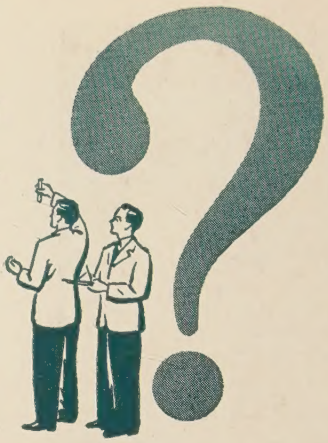

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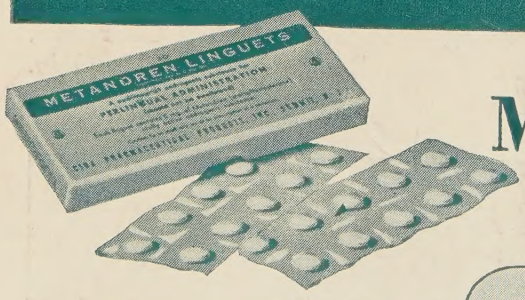

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